

# POTOMAC YARD METRORAIL STATION

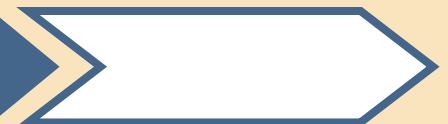
## Historic Architectural Effects Assessment Report

DHR File No. 2012-0717

November 2015



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# **Historic Architectural Effects Assessment Report**

## **Potomac Yard Metrorail Station Project City of Alexandria and Arlington County, Virginia**

**DHR File No. 2012-0717**

### **Lead Federal Agency**

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## ABSTRACT

The Federal Transit Administration (FTA), as the lead federal agency, and the City of Alexandria, as the project sponsor and joint lead agency—in cooperation with the Washington Metropolitan Area Transit Authority (WMATA) and the National Park Service (NPS)—are proposing to construct a new Metrorail station at Potomac Yard (the “project”) within the City of Alexandria, Virginia. The project is a Federal undertaking and subject to review under Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, and the implementing regulations, 36 CFR Part 800. The purpose of this investigation is to identify historic properties in the area of potential effects (APE) that are listed in or eligible for listing in the National Register of Historic Places (NRHP) and to assess the potential effects of the project on such resources.

The study was performed in accordance with Section 106 of the NHPA’s review process and the Virginia Department of Historic Resources (VDHR) *Guidelines for Conducting Historic Resources Survey in Virginia* (VDHR 2011). Background research was conducted at state and local repositories, including files held by the NRHP, VDHR, and the National Archives. An intensive-level survey was conducted on November 12–14, 2012 to verify the APE and photographically document known historic resources and previously unidentified resources.

The APE includes all areas of anticipated direct and indirect effects of the proposed project activities. The APE includes a portion of the former railroad yard known as Potomac Yard and is bound on the west by U.S. Route 1 (Jefferson Davis Highway), on the east by the George Washington Memorial Parkway (GWMP), on the south by Slaters Lane, and on the north by Four Mile Run (west of the Metrorail tracks), with a portion of the APE extending approximately 1,100 feet north into Arlington County between the Metrorail tracks and GWMP.

The investigation determined there are three distinct but interrelated NRHP-listed resources in the APE: Mount Vernon Memorial Highway (MVMH), George Washington Memorial Parkway (GWMP), and Parkways of the National Capital Region, 1913–1965 (PNCR). These three linear resources are significant in the areas of landscape architecture, engineering, commemoration, sculpture, and transportation. Two additional resources over 50 years of age that were not previously documented were identified during the intensive-level identification and consultation phase: the Greens Scenic Area Easement was determined eligible by the Keeper of the NRHP as a contributing resource to the MVMH/GWMP. The Abingdon Apartments will be treated as an eligible historic architectural resource for the purposes of evaluating the effects of this undertaking, although additional research is required to determine if it qualifies for listing in the NRHP as an associated property type of a Colonial Revival Apartment Complexes of Alexandria, Multiple Property Document -- a study yet to be undertaken..

The effects assessment determined that the Preferred Alternative would result in adverse effects to the MVMH, GWMP, and PNCR. Abingdon Apartments would not be adversely affected.

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## 1.0 Introduction

The Federal Transit Administration (FTA), as the lead federal agency, and the City of Alexandria, as the project sponsor and joint lead agency—in cooperation with the Washington Metropolitan Area Transit Authority (WMATA) and the National Park Service (NPS)—are preparing to undertake a Federally funded project: the construction of a new Metrorail station at Potomac Yard in the City of Alexandria, Virginia (“the project”). As a federal undertaking, the project is subject to review under Section 106 of the National Historic Preservation Act, (NHPA), as amended, and its implementing regulations, 36 CFR Part 800. In accordance with Section 106 of the NHPA, this report documents the data collection, field investigation, results, and conclusions of an intensive-level historic architectural survey and assessment of effects of the project on historic properties that are listed in or eligible for listing in the National Register of Historic Places (NRHP) and fall within the Area of Potential Effects (APE). The APE includes a portion of the former railroad yard known as Potomac Yard and is bound on the west by U.S. Route 1 (Jefferson Davis Highway), on the east by the GWMP, on the south by Slaters Lane, and on the north by Four Mile Run (west of the Metrorail tracks), with a portion of the APE extending approximately 1,100 feet north into Arlington County between the Metrorail tracks and GWMP (**Figure 1-1**). The station will be located along the existing Metrorail Blue and Yellow Lines, between the Ronald Reagan Washington National Airport and the Braddock Road stations within the City of Alexandria, Virginia.

The *Draft Environmental Impact Statement* (Draft EIS) considered a No Build Alternative, Build Alternatives A, B, and D, and B-CSX Design Option. Each Build Alternative includes the construction and operation of a WMATA Metrorail station in the Potomac Yard area of the City of Alexandria, Virginia. For a description of Build Alternatives A, B, and D and B-CSX Design Option—as well as the No Build Alternative—see **Section 1.2**. This report evaluates the effects on historic architecture resulting only from the Preferred Alternative.

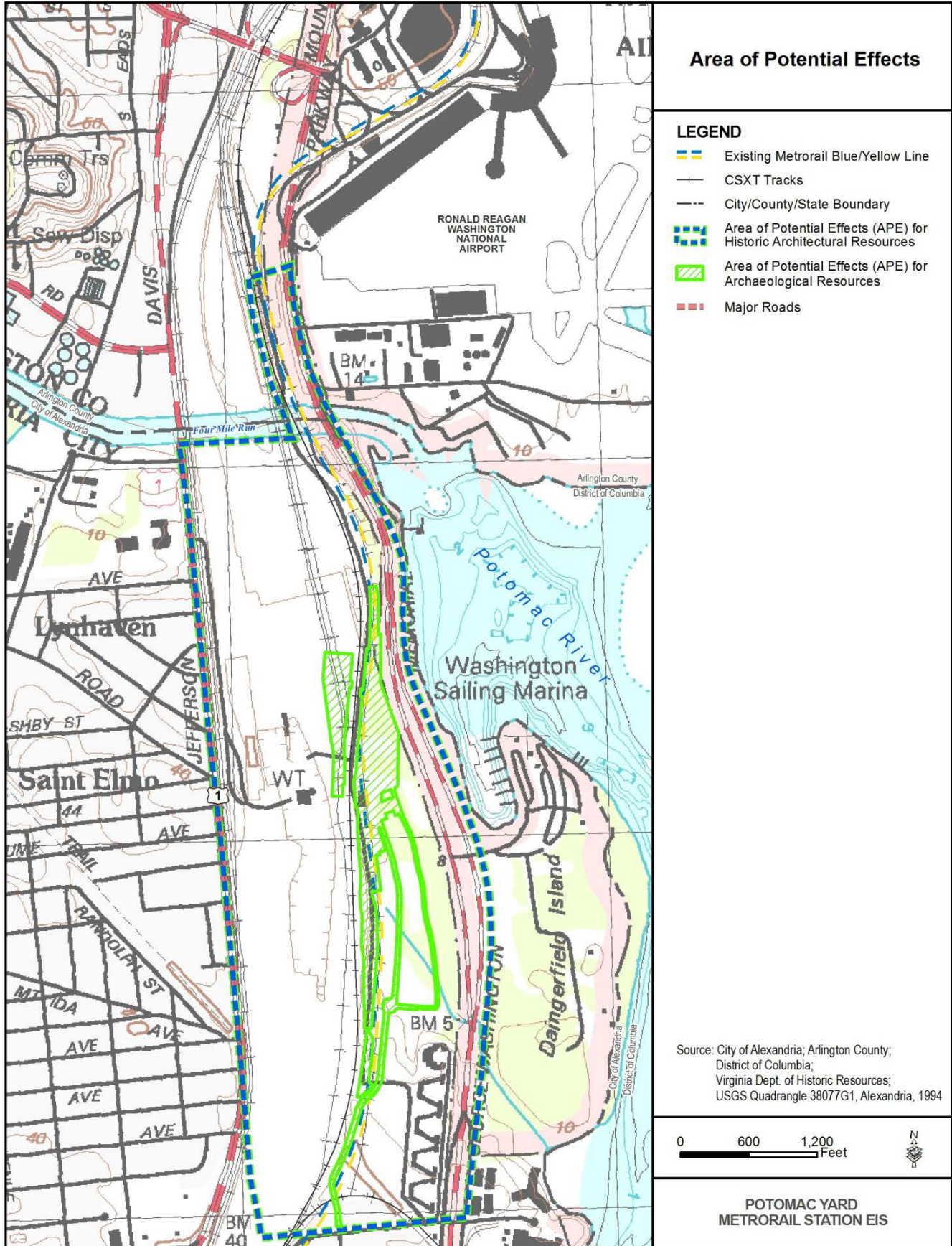
The purpose of the project is to improve accessibility of the Potomac Yard area and provide more transportation choices for current and future residents, employees, and businesses by establishing a new access point to the regional Metrorail system. The additional access point is needed to address existing and future travel demand in the area resulting from the City of Alexandria’s planned development of Potomac Yard, which will include a major transit-oriented, mixed-use activity center in the vicinity of the proposed station.

All investigators exceed the qualifications set forth in the Secretary of Interior’s professional qualification standards (36 CFR 61) for their respective disciplines and positions (NPS 2007). See **Appendix J** for resumes of key staff.

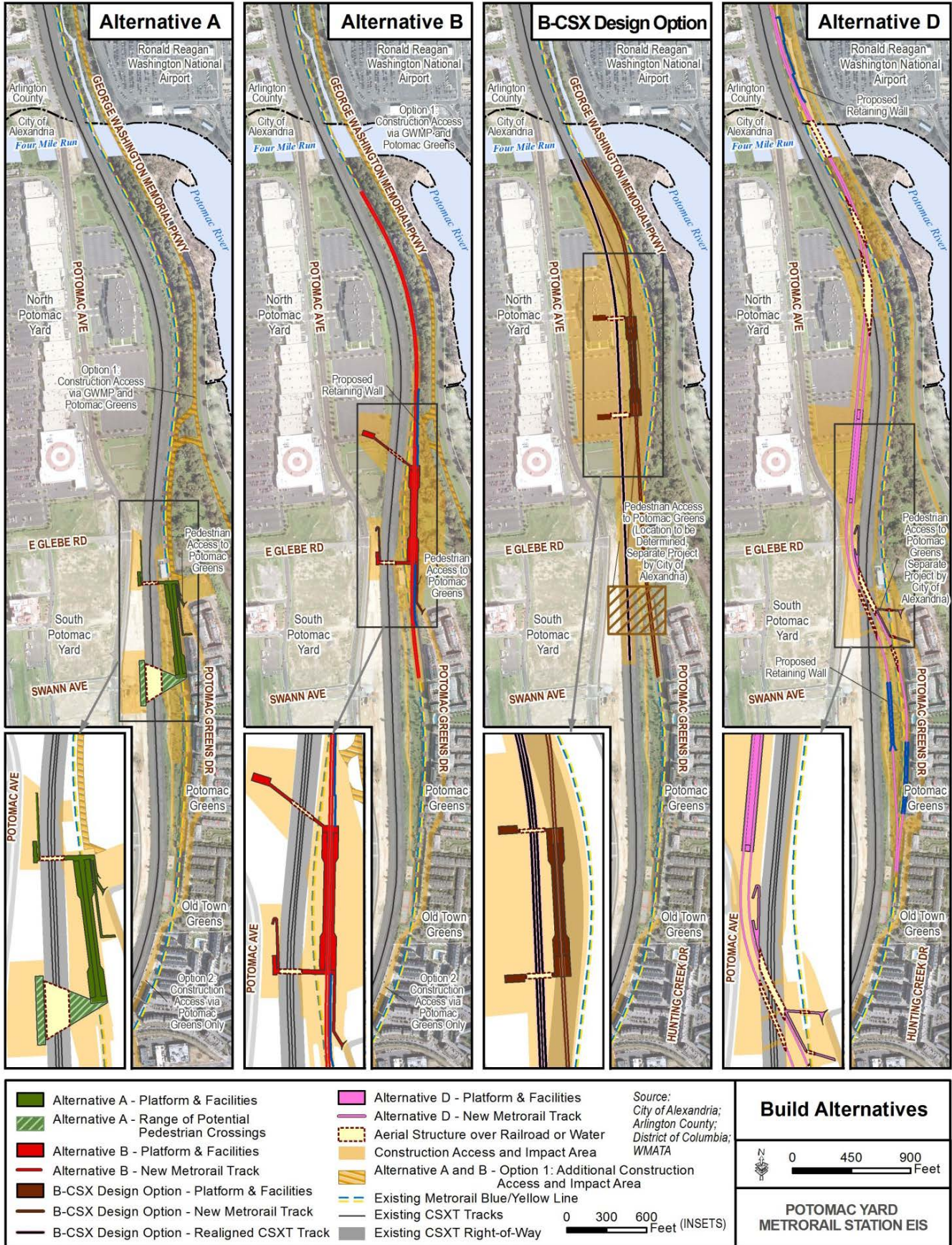
### 1.1 Alternatives Considered

A No Build Alternative, three Build Alternatives, and a design option for one of the Build Alternatives were considered in the Draft EIS. Each alternative included the same area as the No Build Alternative, in addition to construction and operation of a Metrorail station (see **Figure 1-2** and **Table 1-1**). On May 20, 2015, Build Alternative B, Option 2 Construction Access as described in the Draft EIS was selected by the City of Alexandria as the Preferred Alternative for the Potomac Yard Metrorail Project. As documented in Alexandria City Council Resolution 2676, the council selected Build Alternative B because it was deemed the best alternative for supporting the high-density mix of uses envisioned for North Potomac Yard, supporting adjacent communities, and to realizing the transportation, economic development, and fiscal benefits of the project to the community. After the public review period of the Final EIS, FTA and NPS will each issue a ROD, which will state their decision and present the basis for these decisions regarding the NEPA preferred alternative.

Figure 1-1: Area of Potential Effects



**Figure 1-2: Draft EIS Build Alternatives**



## 1.2 Alternatives

### 1.2.1 No Build Alternative

The No Build Alternative is defined as the existing highway and transit network and committed transportation improvements from the National Capital Region Transportation Planning Board’s Financially Constrained Long Range Plan (CLRP). The environmental impact statement (EIS) assumes that any improvements that are anticipated to be implemented by the project horizon year, whether physical or operational, are part of the No Build Alternative, with the exception of the new Metrorail Station at Potomac Yard.

The No Build Alternative would consist of the existing transportation network, plus all of the committed projects within the study area, except the construction of the Metrorail Station at Potomac Yard. The projects included in the No-Build Alternative are separate projects not associated with the proposed Potomac Yard Metrorail Station and would be built whether or not a Metrorail station is constructed.

### 1.2.2 Draft EIS Build Alternatives

The Build Alternatives are shown in **Figure 1-2** and summarized in **Table 1-1**.

**Table 1-1: Description of Build Alternatives**

Alternative	Type and Layout	Track Work	Facilities for Station Access	Additional Structures Required
<b>Build Alternative A</b>	At-grade, side platform	Minimal track work	Two pedestrian bridges over CSXT right-of-way; access to Potomac Greens via walkway	None
<b>Build Alternative B</b>	At-grade, side platform	Moderate track work	Two pedestrian bridges over CSXT right-of-way; access to Potomac Greens via walkway	Structures (retaining wall) to support new track and station
<b>B-CSX Design Option</b>	At-grade, side platforms	Major track work, including realignment of CSXT tracks	Two pedestrian bridges over CSXT right-of-way	None
<b>Build Alternative D</b>	Aerial, center platform	Major track work	None	Two aerial structures over CSXT right-of-way, one Metrorail bridge over Four Mile Run, aerial track and supports, and retaining wall replacement on the east and west sides of the tracks north of the existing Metrorail portal. New structures would pass over the existing Metrorail tracks, which would be removed following construction.

Note: Track work for Build Alternatives B and D assumes existing Blue and Yellow Line Metrorail track would be removed where track is realigned.

### 1.2.3 Preferred Alternative

The Preferred Alternative would be located between the GWMP and the CSXT right-of-way, north of the Potomac Greens neighborhood, partially within Potomac Greens Park and the Greens Scenic Area

easement, and east of the existing Potomac Yard Shopping Center (North Potomac Yard) and the CSXT right-of-way (see **Figure 1-3**). The station would be at-grade with a side platform layout. Additional station facilities would include two pedestrian bridges from the station over the CSXT right-of-way to the planned development in Potomac Yard. The bridge at the southern end of the station would provide 24-hour pedestrian/bicycle access between Potomac Yard and the Potomac Greens neighborhood.

The Preferred Alternative would require the realignment of approximately 650 feet of existing track, as well as the installation of approximately 1,450 feet of new track to provide a straight section of track for the proposed station location and meet other WMATA track design requirements. Special track work—a double crossover—would be required approximately 100 feet north of the station.

The new track and station would be built on fill, and a new retaining wall or earthen berms would be constructed on the east side of the track and station to support the structures. These design options are described below under “Preferred Alternative Refinements to Build Alternative B.” The station would be located partly in existing wetlands.

The Preferred Alternative would require realignment of existing track, construction of new track, and construction of the proposed station in the vicinity of existing Metrorail tracks. To construct the Preferred Alternative, access would be required to the area east of the existing Metrorail tracks. Construction access would be located to the area east of the existing Metrorail tracks through the residential areas of Potomac Greens and Old Town Greens via the entire length of Potomac Greens Drive (0.7 mile); construction vehicles would access this area from U.S. Route 1. A small area of GWMP property, located just north of the proposed Metrorail station, is required to accommodate the track connecting the station to the existing Metrorail mainline and the construction access and staging area for the installation of a crossover switch on the realigned track. For Option 1, 0.16 acre of GWMP property would be permanently required to accommodate the connecting track and 0.42 acre of GWMP property would be temporarily used to accommodate construction access and staging. For Option 2, 0.33 acre of GWMP property would be permanently required to accommodate the connecting track and 0.25 acre of GWMP property would be temporarily used to accommodate construction access and staging. No access would be provided from the GWMP roadway for either option.

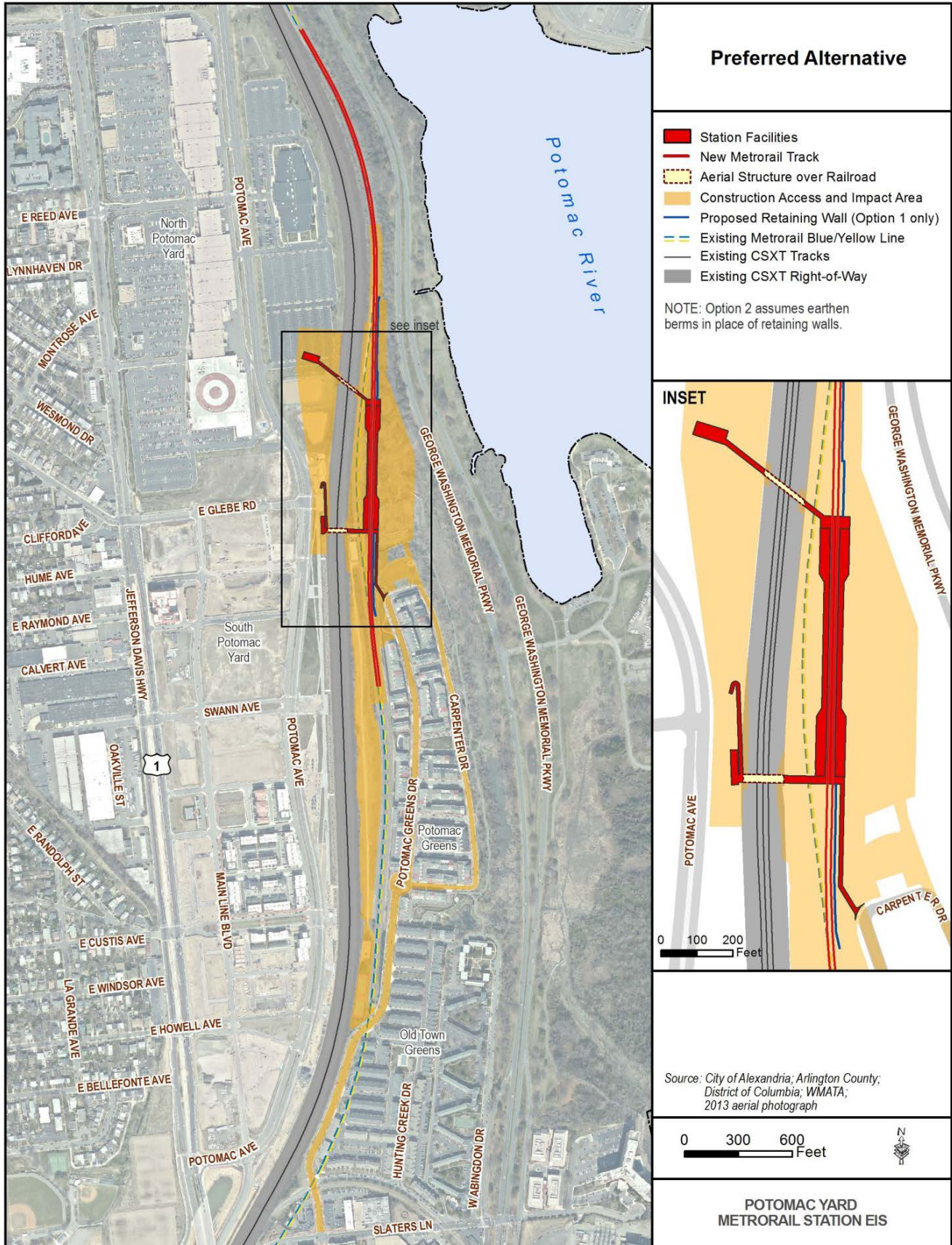
The Preferred Alternative would require access to the area west of the existing Metrorail tracks for some construction tasks, including the construction of the two pedestrian bridges; the access would utilize the access road through the Rail Park to the WMATA traction power substation (0.5 mile), crossing the existing Metrorail alignment at the tennis court area of Old Town Greens (where Metrorail begins to travel below-grade). A construction access easement would also be required across a portion of the CSXT right-of-way so that construction vehicles utilizing the Rail Park roadway can get around the west side of the existing traction power substation and be able to access the area north of the substation between the existing CSXT and Metrorail tracks. The easement would not cross CSXT tracks.

Although the Preferred Alternative is located east of the CSXT right-of-way, access would be required west of the CSXT right-of-way in Potomac Yard Park to construct landings and vertical circulation elements (escalators, elevators, and ramp) for the pedestrian bridges. Access would be provided via Potomac Avenue and U.S. Route 1.

More detail on construction staging will become available as discussions with property owners continue through the Final EIS and through final engineering design prior to construction.

The tracks and ties would be removed from the segment of the existing Metrorail line that would no longer be needed for the Preferred Alternative. No decision has been made regarding the re-use of this segment of track.

Figure 1-3: Preferred Alternative



## Preferred Alternative Refinements to Build Alternative B

As the identified Preferred Alternative for the project, Build Alternative B, Option 2 Construction Access (no construction access from the GWMP roadway), will be developed further based on more detailed architectural and engineering design of station and track facilities, and to minimize adverse impacts to adjacent resources.

### Design Options

For the Preferred Alternative, design refinements are underway to minimize the visual impacts of the eastern station building wall and the retaining walls along the realigned track (see Option 1, below). Replacing the retaining walls with earthen fill and extending these berms along the station wall and under the maintenance access easement would horizontally expand the footprint of the physical improvements (see Option 2, below). This expanded footprint would further extend into the Greens Scenic Area easement and a portion of the GWMP property, affecting ground level resources in those areas, including forest and wetland vegetation and floodplain.

To demonstrate the relative difference between these two options and to encompass the maximum extent of impacts to visual and other environmental resources, the Final EIS presents two design options as follows:

- **Option 1 – Full Retaining and Station Walls:** the option maintains the design of Build Alternative B along the eastern side of the station building and realigned track. The station wall extends down to the existing grade level along the eastern side of the station and retaining walls support the full extent of the realigned tracks to the north and south of the station. Based on the design of Build Alternative B, the dimensions of the walls are approximately as follows:
  - Exposed portion of station wall below the level of the Metrorail tracks: approximately 15 feet in height from grade level and 650 feet in length.
  - South retaining wall: maximum height of 14 feet tapering to 0 feet over the 120 feet in length visible from areas east of Potomac Greens Park. The tapered retaining wall continues south an additional 340 feet behind the lawn area of Potomac Greens Park and the townhomes but will not be visible from areas to the east of Potomac Greens.
  - North retaining wall: maximum height of 18 feet, tapering down to the north over the 580 feet length.
- **Option 2 – Full or Partial Berm:** the option replaces the retaining walls with earthen fill and extends these berms along the station wall and under the maintenance access easement around the station. This option reduces the visual impact of the station wall on the GWMP and the associated Scenic Easement by using a vegetated earthen berm to screen the portion of the station structure below the tracks and to support the maintenance access easement and realigned track beds. The earthen berm would be between 12 and 22 feet in height, about 1,800 feet in length, and extend out to the east side as much as 17 feet. This option would increase the footprint of the station and realigned track area within parkland and natural areas along their eastern side by up to 30 percent.

The finalized design of the Preferred Alternative may incorporate design elements of the above two design options. As design refinements are ongoing, additional minor refinements proposed for mitigation of project impacts will be specified in the Record of Decision.

**Figures 1-4 through 1-9** of the following pages depict the two design options in plan, section, and elevation view. Detailed depictions of Preferred Alternative Options 1 and 2 are also shown in **Appendix L**.

**Figure 1-4: Preferred Alternative, Option 1 Plan View**

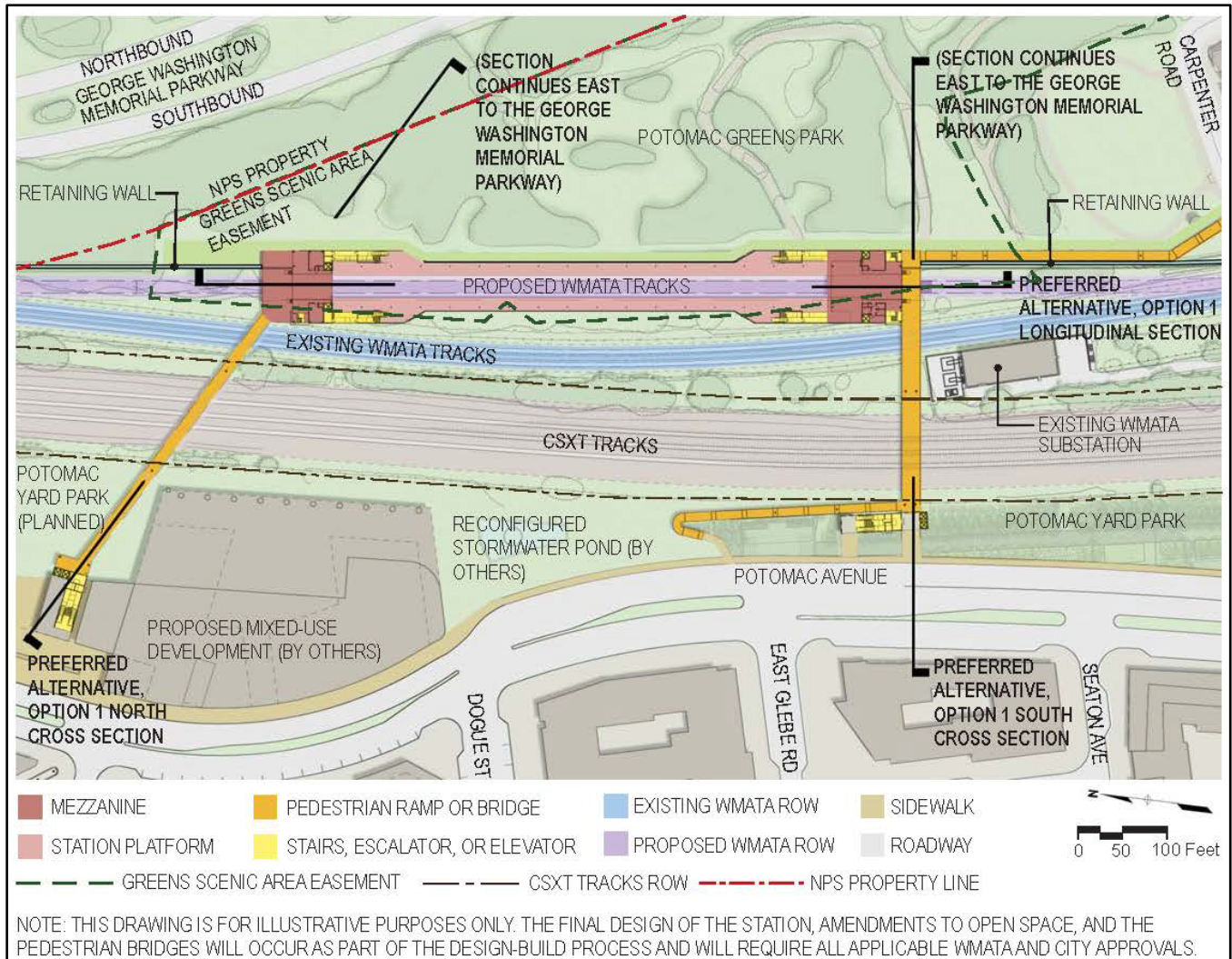
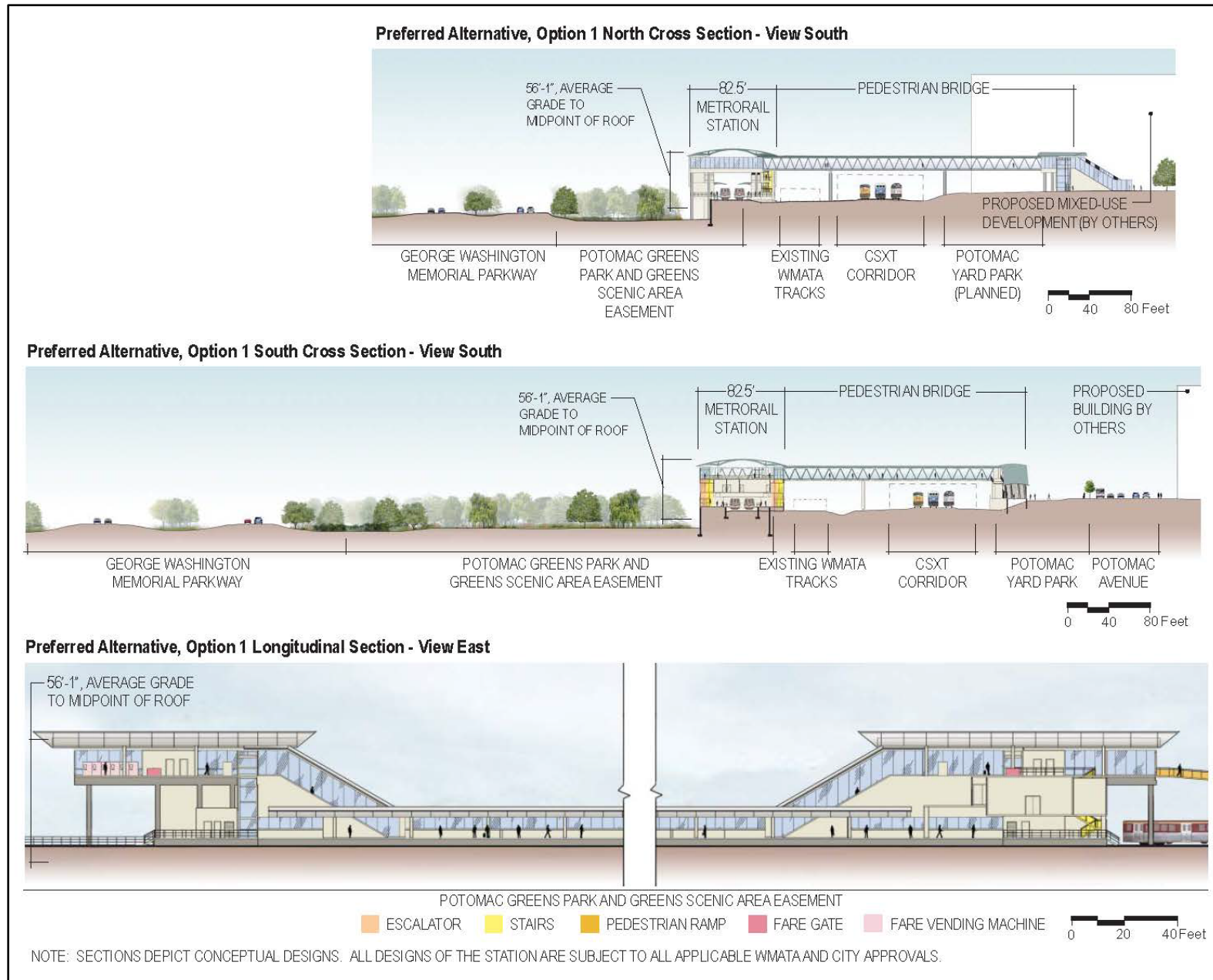
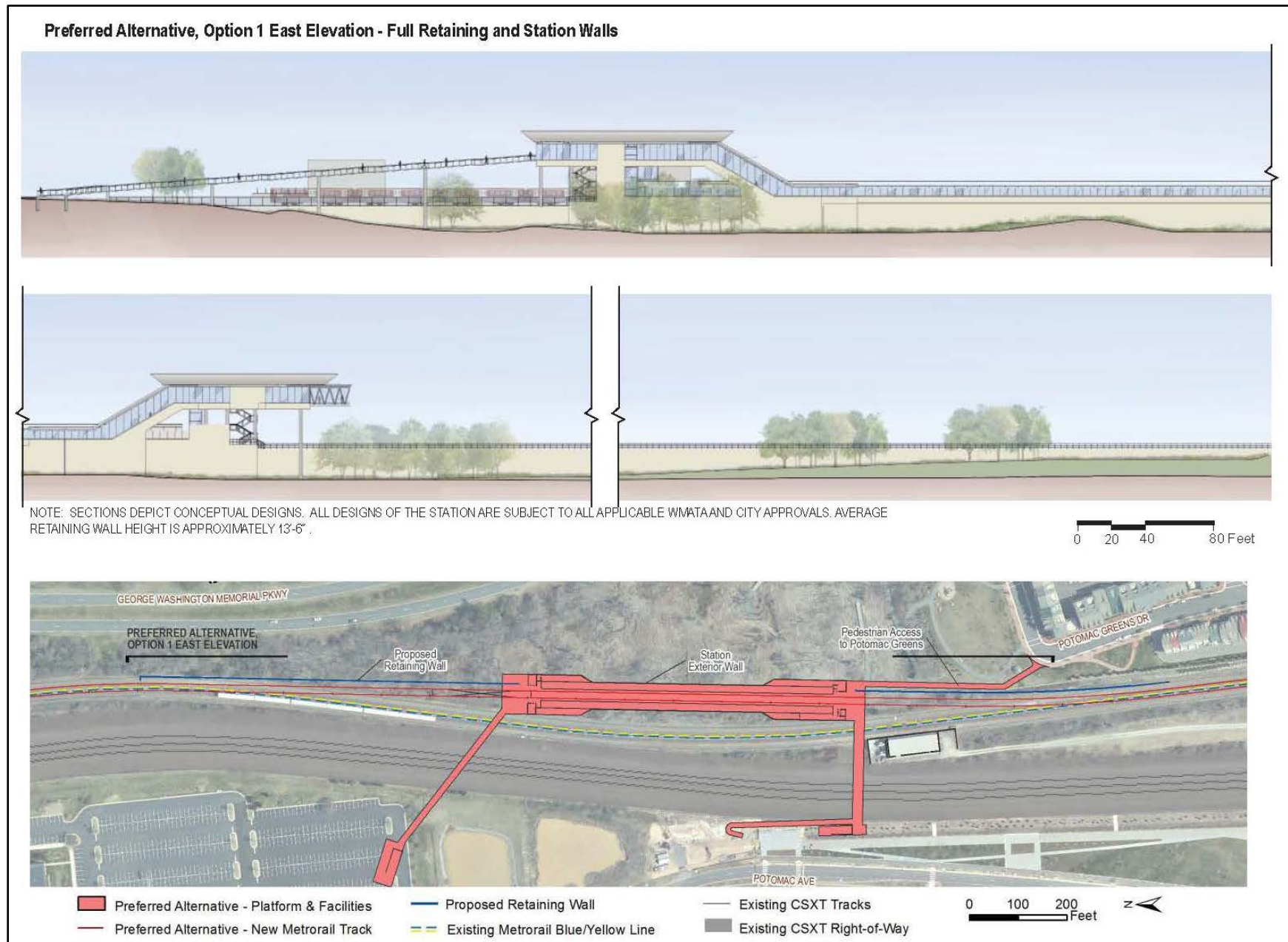


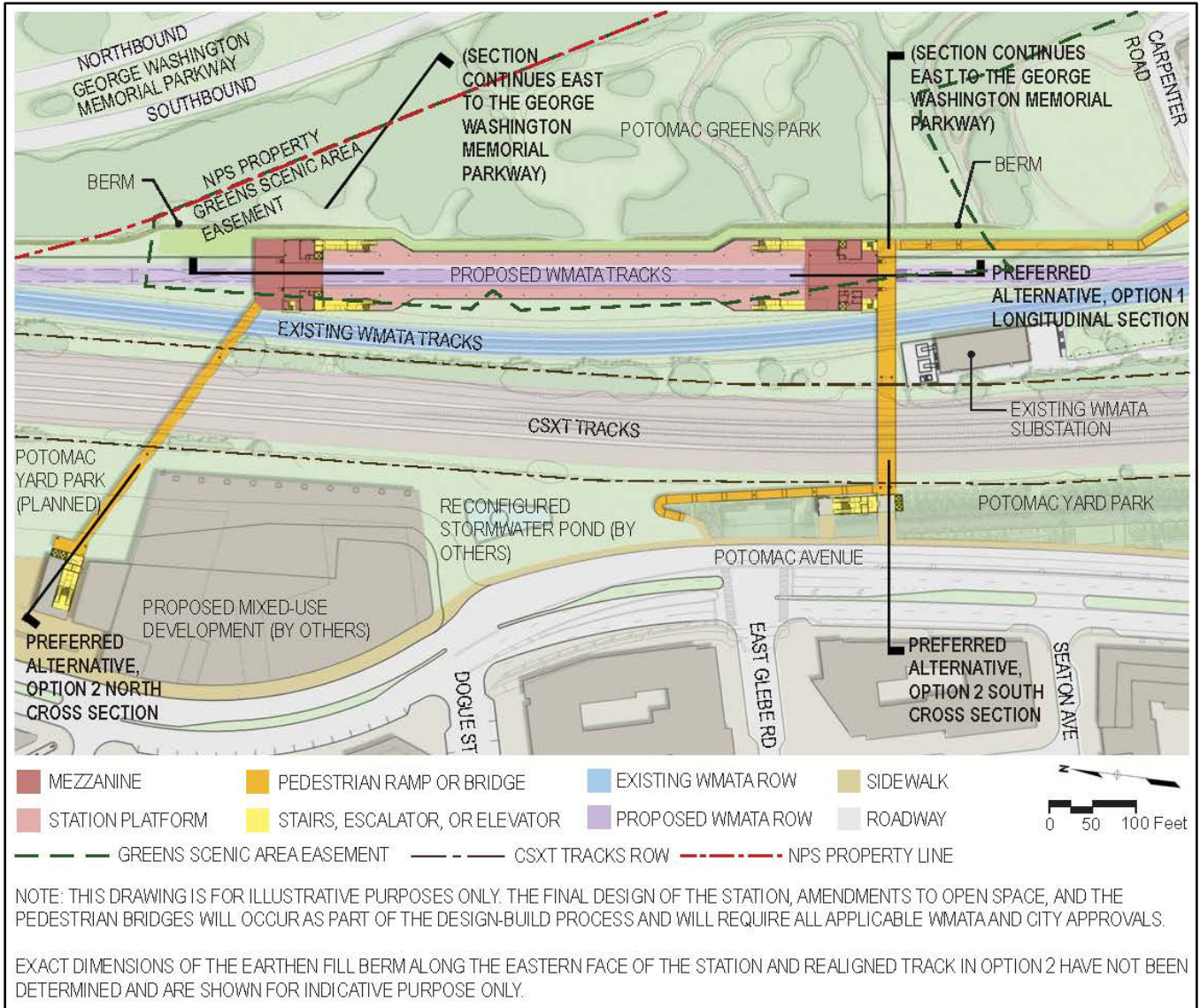
Figure 1-5: Preferred Alternative, Option 1 Section View



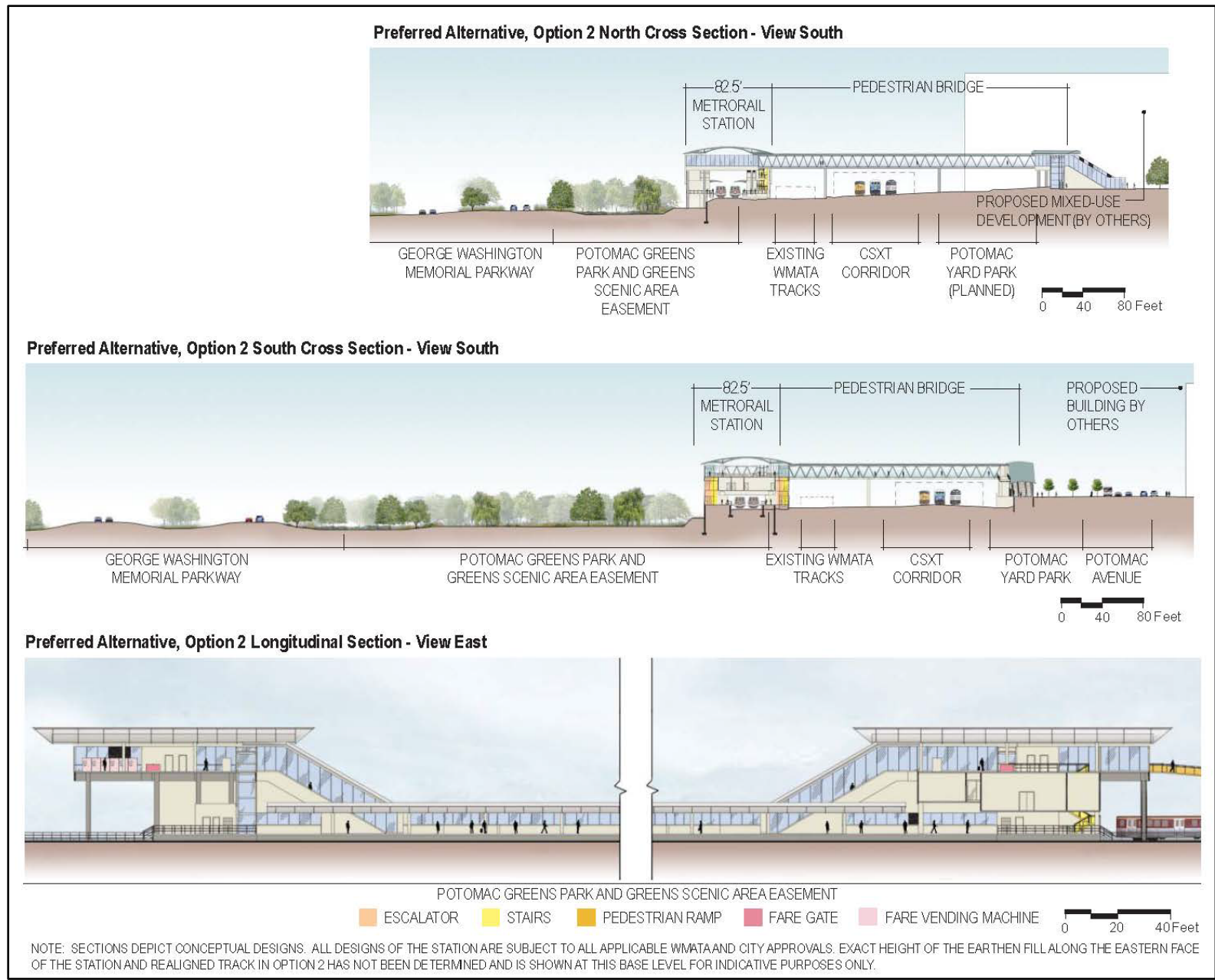
**Figure 1-6: Preferred Alternative, Option 1 Eastern Elevation View**



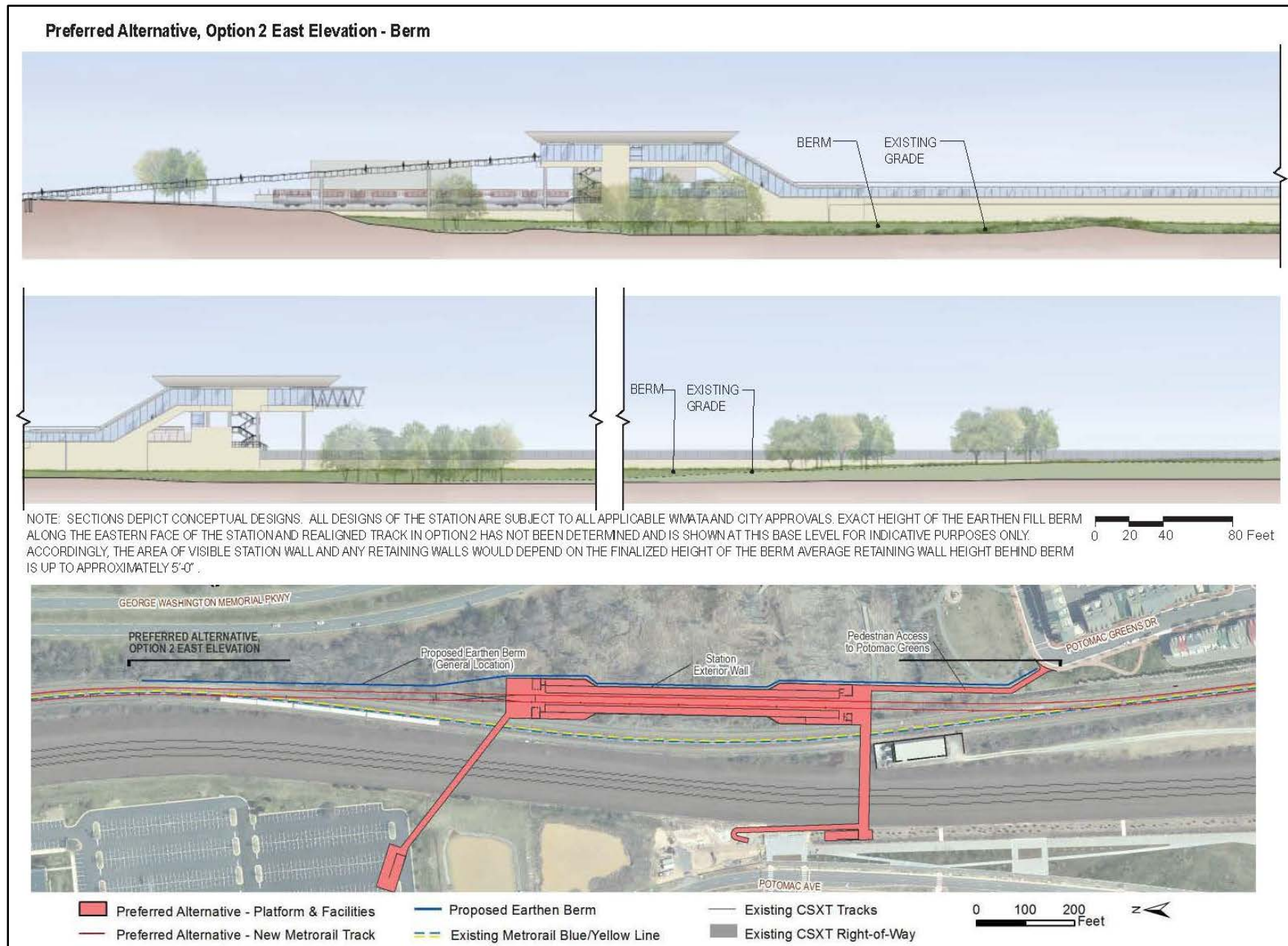
**Figure 1-7: Preferred Alternative, Option 2 Plan View**



**Figure 1-8: Preferred Alternative, Option 2 Section View**



**Figure 1-9: Preferred Alternative, Option 2 Elevation**



## Construction Staging and Access Refinements from Build Alternative B

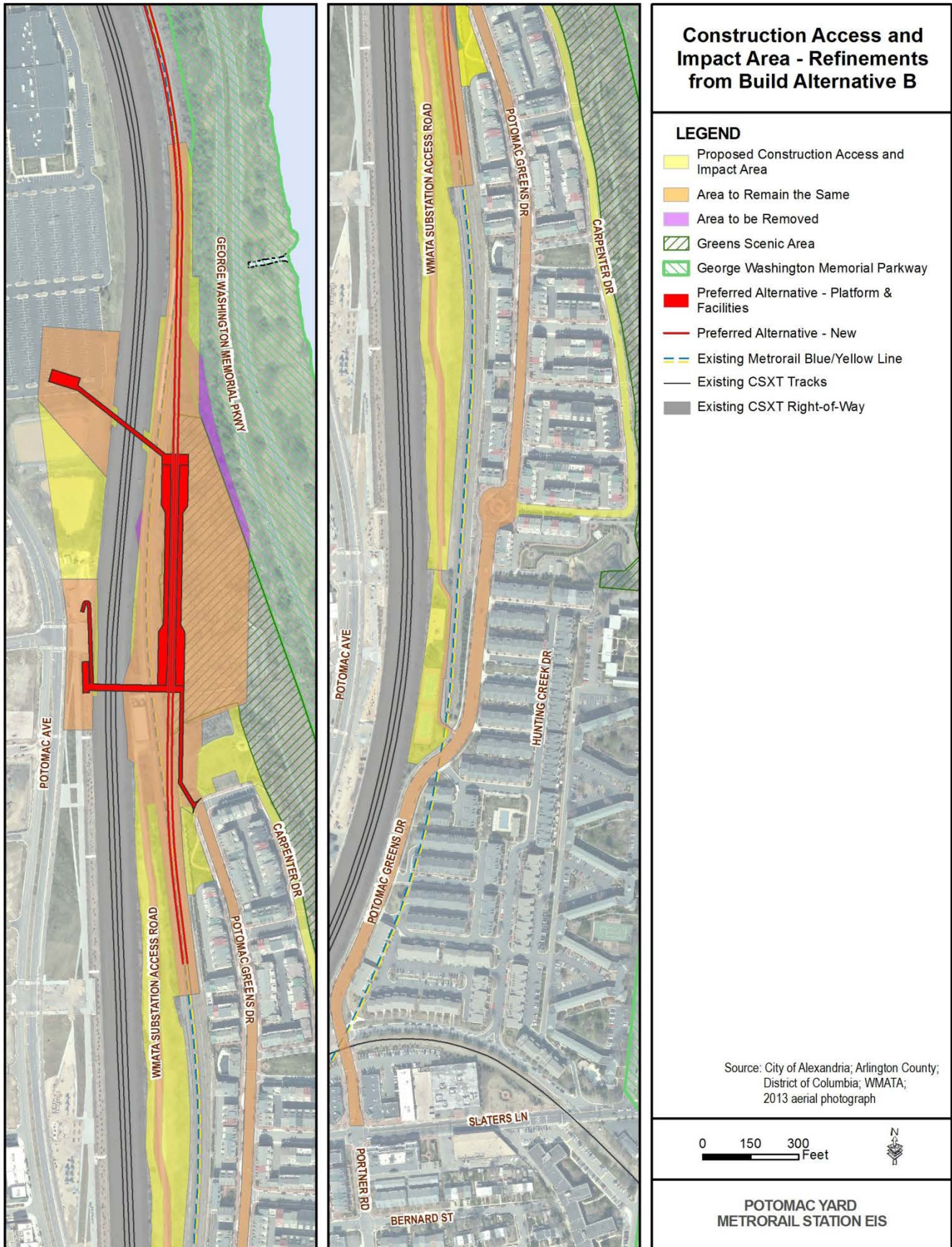
Refinements were made to the preliminary construction staging area and access routes presented in the Draft EIS for Build Alternative B, Option 2 Construction Access (no access from the GWMP roadway). The refinements incorporate more detailed development of construction phasing plans since the Draft EIS and efforts to reduce impacts to resources identified in the Draft EIS. The construction staging areas and access refinements from Build Alternative B are shown in **Figure 1-1**.

The following refinements are made for the Preferred Alternative:

- *East of the Metrorail tracks* – To minimize impacts to the GWMP, the extent of the Build Alternative B construction staging area on the GWMP property is removed except where required for direct access to build the realigned track at the northern end of the project site. A wider area of construction activity immediately north of the station is indicated to accommodate installation of a crossover switch on the realigned track. Between 0.25 and 0.42 acres of GWMP property in this area will be required to accommodate construction staging. The construction staging areas avoid archaeological sites identified during the Phase I archaeological investigations. In addition, to allow for potential minor design modifications to the station pedestrian and bicycle access facilities in Potomac Greens Park, the extent of the construction staging area and access area is expanded by up to 0.88 acre to accommodate potential modifications.
- *In between the Metrorail tracks and CSXT right-of-way* – The construction staging area is expanded by about 5.37 acres to the south across the full extent of the City of Alexandria Rail Park to accommodate construction contracting offices at this location rather than at the northern end of the Potomac Greens neighborhood, thereby reducing vehicular traffic along Potomac Greens Drive by construction employees.
- *Access Routes through the Old Town Greens and Potomac Greens neighborhoods* – To ensure safe conditions along the construction access route along the WMATA substation access road through the Old Town Greens common area, the project proposes temporarily relocating the playground to another site within Old Town Greens and temporarily closing the tennis courts for the duration of construction. Similarly, to ensure safe conditions along the construction access route from the northern end of Potomac Greens neighborhood into Potomac Greens Park, the project proposes temporarily relocating or closing the playground for the duration of construction. To allow construction vehicles to circulate in a single direction with less impact to neighborhood traffic flow, the access route through the Potomac Greens neighborhood also includes Carpenter Road.
- *West of the CSXT tracks* – To allow for potential minor design modifications to the station entrance pavilions and pedestrian and bicycle access facilities along Potomac Yard Park, the extent of the construction staging area and access area is expanded by about 0.15 acre to accommodate potential modifications.

As design refinements are ongoing, additional minor refinements proposed for mitigation of construction impacts will be specified in the Record of Decision.

Figure 1-10: Construction Access and Impact Area – Refinements from Build Alternative B



### 1.3 Purpose and Organization

This report provides an assessment of potential effects to historic resources associated with proposed construction of a Metrorail station in the Potomac Yard area of Alexandria, Virginia. The report is organized as follows:

- **Section 1.0** introduces the study and report;
- **Section 2.0** discusses the methodology;
- **Section 3.0** provides an overview of the historic context of the study area;
- **Section 4.0** identifies historic properties in the APE;
- **Section 5.0** describes anticipated effects of the Preferred Alternative on the historic properties; and
- **Section 6.0** summarizes the results of the effects assessment and measures being developed to mitigate adverse effects.

## 2.0 Methodology

The approach employed for this study follows the standard methodology for conducting architectural surveys as defined in the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* (NPS 2007) and VDHR's *Guidelines for Conducting Historic Resources Survey in Virginia* (VDHR 2011). Below is a detailed description of the methodologies used for the identification and evaluation phase studies. This intensive-level investigation and effects assessment was completed at the request of VDHR to satisfy the evaluation phase of the Section 106 process.

### 2.1 Summary of the Identification Phase Studies

FTA initiated Section 106 consultation with VDHR on May 10, 2012 (DHR File No. 2012-0717). In support of that effort, background research was conducted, a preliminary site visit was made, and the APE established. Details of this effort are discussed below (see **Appendix G** for copies of agency correspondence).

#### 2.1.1 Background Research

An initial file search was conducted at VDHR to locate previously documented historic properties near the project. Researchers systematically reviewed background materials to search for previously identified historic architectural resources within the study area, and to evaluate the potential of the study area to contain previously unidentified historic architectural resources. Information gathered during background research was used to guide the development of the APE and the field investigation. Previous cultural resource surveys conducted in proximity to the study area, as well as maps of previously recorded historic properties, were consulted prior to the site visit to assist in the preparation of this report.

Research efforts included a search of NRHP, Virginia Landmarks Register (VLR), and other survey files held by VDHR in Richmond, Virginia. Copies of files pertaining to previously identified historic architectural resources in the APE were obtained. The NPS was contacted for studies and background materials related to the study area and research was conducted at the George Washington Memorial Parkway Headquarters in McLean, Virginia. Additional searches were conducted online at the NRHP website and the Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER)/Historic American Landscapes Survey (HALS) website, maintained by the Library of Congress (LoC). The nominations for NRHP-listed properties in the APE are included in **Appendix C**, **Appendix D**, and **Appendix E**.

Local historic preservation organizations were also consulted to gather information about locally designated or recognized historic architectural resources that might inform the study. This search included the Historic Preservation Office website for the City of Alexandria Department of Planning and Zoning and the Historic Preservation Program website of the Arlington County, Virginia Office of Neighborhood Services.

#### 2.1.2 Reconnaissance-Level Field Investigation and Area of Potential Effects

A reconnaissance-level field investigation was conducted to establish a potential APE and identify previously undocumented historic architectural resources over 50 years of age at the time this report was prepared, October 2015. Historic architectural resources in the study area were photographed and located on a map, and a preliminary APE was established in the field. The APE encompasses all areas where construction activities could directly or indirectly affect NRHP listed or eligible properties. The APE is defined as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist” (36 CFR §800.16[d]).

The APE encompasses properties within the limits of disturbance, as well as adjacent properties that may be visually or contextually affected by the project. Development of the APE took into consideration effects

that could result from temporary or permanent construction and operational activities that include (but are not limited to): physical effects, visual effects, auditory effects, atmospheric effects, vibration effects, and changes in the character or use of historic properties. The APE includes a portion of the former railroad yard known as Potomac Yard and is bound on the west by U.S. Route 1 (Jefferson Davis Highway), on the east by the GWMP, on the south by Slaters Lane, and on the north by Four Mile Run (west of the Metrorail tracks), with a portion of the APE extending approximately 1,100 feet north into Arlington County between the Metrorail tracks and GWMP (see **Figure 1-1**).

On June 12, 2012, VDHR concurred that the project was a “federal undertaking” subject to Section 106 review and concurred with the proposed APE for direct effects. At that time, VDHR requested additional justification that the proposed APE for indirect effects considered visual, audible, and reasonably foreseeable secondary consequences. VDHR also requested that a list of potential consulting parties be submitted to them for review and consideration (see **Appendix G**).

Justification and revision of the APE were submitted to VDHR in a meeting held at its offices on July 9, 2012. VDHR staff concurred with the APE for indirect effects at that time. The indirect APE was later expanded at the request of NPS during a consulting parties meeting held on March 27, 2013. NPS requested that the eastern boundary of the indirect APE be extended to the Potomac River shoreline north of Daingerfield Island to include the Mount Vernon Trail. VDHR agreed with this change during the meeting (see **Appendix H** for the meeting minutes). The APE for direct effects was later expanded to accommodate the limits of disturbance of a design option for one of the Build Alternatives.

In the July 12, 2012 letter, VDHR requested a Reconnaissance Level Survey Form be completed for the Potowmack Crossing at Old Town Condominiums complex (historical name is Abingdon Apartments) to satisfy the identification phase for historic architectural resources. The draft survey form was submitted to VDHR on February 25, 2013; a copy is located in **Appendix B**.

## **2.2 Summary of the Evaluation Phase Studies**

This effects assessment was completed at the request of VDHR to satisfy the evaluation phase of the Section 106 process.

### **2.2.1 Intensive-Level Field Investigation**

During November 12–14, 2012, the site and surrounding area was inspected by a qualified architectural historian. A vehicular and pedestrian investigation of the APE was conducted to photograph historic architectural resources that are listed in, or determined eligible for listing in, the NRHP. Photographs were taken showing the resources, the project site, and the surrounding setting, and the images were keyed to a map.

### **2.2.2 Background Research**

After completion of the intensive-level field investigation, additional research was conducted to gather detailed information about the history of the project area and the NRHP-listed or eligible resources in the APE. The research was designed to trace the development of the area and establish a reasonably accurate date range for each property in the APE that was not previously identified. Types of sources consulted included historical maps, atlases, and aerial photographs; city property records; and secondary source materials. For previously documented historic properties in the APE, further research focused on primary source materials and was aimed at collecting additional information to support the NRHP evaluations and support the effects assessment. The repositories and websites visited included the Library of Congress (LoC) (Washington, D.C. location), the National Archives (Washington, D.C., College Park, Maryland, and

Suitland, Maryland locations); United States Geological Survey (USGS) websites (2012a, 2012b), and the Historic Aerials website (Nationwide Environmental Title Research, LLC. 2009).

### 2.2.3 NRHP Criteria for Evaluation

As part of the effort to complete a Reconnaissance-Level Survey Form, the potential eligibility of Abingdon Apartments for listing in the NRHP was evaluated. Historic properties, to be considered eligible for listing in the NRHP, must be at least 50 years of age, meet at least one of the four NRHP criteria, and retain sufficient historic integrity to convey their significance. The NRHP uses the following four criteria (36 CFR §60.4) to evaluate significance:

**Criterion A:** [properties] that are associated with events that have made a significant contribution to the broad patterns of our history; or

**Criterion B:** [properties] that are associated with the lives of persons significant to our past; or

**Criterion C:** [properties] that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master; or that possess high artistic values; or that represent a significant and distinguishable entity whose components may lack individual distinction; or

**Criterion D:** [properties] that have yielded, or may be likely to yield, information important in prehistory or history.

Certain kinds of properties that are not usually considered for listing in the NRHP may be eligible if they meet special requirements called criteria considerations. For a property to qualify under one of the seven criteria considerations (36 CFR §60.4), it must first meet one or more of the four criteria for evaluation and must also possess integrity. The seven criteria considerations are as follows:

**Criteria Consideration (a):** a religious property deriving primary significance from architectural or artistic distinction or historical importance; or

**Criteria Consideration (b):** a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

**Criteria Consideration (c):** a birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his or her productive life; or

**Criteria Consideration (d):** a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, from association with historic events; or

**Criteria Consideration (e):** a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

**Criteria Consideration (f):** a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or,

**Criteria Consideration (g):** a property achieving significance within the past 50 years if it is of exceptional importance.

Through research and analysis, Abingdon Apartments was recommended eligible for listing in the NRHP as part of a potential, but as yet unplanned, Multiple Property Document (MPD) of Colonial Revival Apartment Complexes in Alexandria (CRACA). The apartments are significant under Criterion A for its contribution to the early development of apartment construction as well as the early twentieth century development of the north end of Alexandria. They are also significant under Criterion C as excellent examples of Colonial Revival-style garden apartments in the City of Alexandria from the second quarter of the twentieth century.

See **Section 4.0** and **Appendix B** for the full eligibility assessment of Abingdon Apartments.

#### 2.2.4 Criteria of Adverse Effect

Following the intensive-level field investigation and additional background research were conducted, the information was analyzed and a preliminary effects assessment report was prepared (March 2013). The Draft EIS was released in March 2015 and the Locally Preferred Alternative was selected in May 2015.

Section 106 regulations state that if there are historic properties in the APE which may be affected by a federal undertaking, the agency official will assess adverse effects, if any, in accordance with the criteria of adverse effect described in 36 CFR 800.5. As stated in the guidance, an “adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association” (36 CFR 800.5[a][i]). Effects can be direct, indirect, reasonably foreseeable, or cumulative.

Examples of adverse effects provided in 36 CFR Part 800.5(a)(2) include, but are not limited to:

- (i) Physical destruction of or damage to all or part of the property;
- (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary [of Interior] *Standards for the Treatment of Historic Properties* (36 CFR Part 68) and applicable guidelines;
- (iii) Removal of the property from its historic location;
- (iv) Change of the character of the property’s use or of physical features within the property’s setting that contribute to its historic significance;
- (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property’s significant historic features;
- (vi) Neglect of property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- (vii) Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance.

### 2.3 Public Participation and Consulting Parties

According to 36 CFR 800.2(c)(1-6), a number of parties can have a consultative role in a project considered an undertaking under Section 106. These parties can include state and tribal historic preservation officers (SHPOs and THPOs); Native American tribes; representatives of local governments; applicants for federal

assistance, permits, licenses, and other approvals; and certain individuals and organizations who have demonstrated an interest in the undertaking. The goal of Section 106 consultation is to identify historic properties that could be affected by a project, to assess the project's potential effects to such properties, and to seek ways to avoid, minimize, or mitigate any adverse effects to historic properties.

Consultation with VDHR and the appropriate consulting parties is ongoing throughout this project. On August 24, 2012, VDHR concurred with an initial list of potential consulting parties transmitted by FTA via email. As part of the subsequent outreach process, FTA sent invitations to potential consulting parties on September 13, 2012. Organizations invited to become consulting parties and copies of the invitation letters are presented in **Appendix H**. Organizations that accepted the invitation include:

- National Park Service, George Washington Memorial Parkway
- United States Army Corps of Engineers, Norfolk District
- City of Alexandria, Historic Preservation Office, Department of Planning and Zoning; Alexandria Archeology; and Office of Historic Alexandria
- Alexandria Historical Society
- Alexandria Historical Restoration and Preservation Commission
- Alexandria Federation of Civic Associations
- Old Town Business and Professional Association
- Arlington County Department of Community Planning, Housing and Development, Neighborhood Services Division
- Lynhaven Civic Association
- NorthEast Citizens' Association

Consulting parties have had the opportunity to review and comment on the preliminary effects assessment report and participate in the development of measures to avoid, minimize, and mitigate adverse effects to historic properties. FTA held the first consulting party meeting to discuss the identification of archaeological and historic architectural resources on February 20, 2013, in the City of Alexandria. A second meeting to discuss eligibility of resources in the APE was held on March 27, 2013. Copies of the minutes from both meetings are presented in **Appendix H**. A third meeting has been tentatively scheduled for November 2015.

## 2.4 Determination of Eligibility

On June 27, 2013, VDHR provided comments to FTA on the preliminary effects assessment report. While VDHR concurred that Abingdon Apartments may be NRHP eligible as part of a potential Multiple Property Document (MPD) of Colonial Revival Apartment Complexes in Alexandria, the agency felt additional research, as well as development of a full context for such a document, was necessary before eligibility could be determined. As an alternative option, VDHR offered that FTA could treat Abingdon Apartments as NRHP eligible for the purposes of Section 106 review and this undertaking, which is the approach assumed in this report.

The Greens Scenic Area Easement was identified during the background research stage as a property easement administered by NPS, located within the project study area but outside the boundaries of the NRHP-listed MVMH, GWMP, or PNCR. On December 4, 2014, FTA, in coordination with NPS, sought a formal determination of eligibility on whether the easement area is eligible for NRHP listing or consideration as a contributing resource of a NRHP listed property. In the meantime, it was identified as a non-eligible resource in the preliminary effects report. At the request of the Keeper of the National Register, additional information was added to the technical memorandum detailing the history of the parcel (included in the initial determination request); this additional information was submitted to the Keeper in February 2015. Subsequently, on March 17, 2015, the Keeper of the National Register issued a formal Determination of

Eligibility Notification that determined the easement area to be NRHP eligible as a resource that contributes to the scenic qualities of the MVMH (see **Appendix G**).

## 2.5 Resolution of Adverse Effects

Section 106 regulations state that when an agency finds that there is an adverse effect, the agency must begin consultation to seek ways to avoid, minimize, or mitigate the adverse effects. The agency consults to resolve adverse effects with the SHPO and other consulting parties. Consultation usually results in a Memorandum of Agreement (MOA), which outlines measures that the agency will take to avoid, minimize, or mitigate the adverse effects.

Provisions relating to an MOA are detailed in 36 CFR Part 800.6. An MOA documents an agency's compliance with Section 106 of the NHPA and, as such, the agency is obligated to follow its terms. The MOA is prepared in consultation with the SHPO and other consulting parties, as necessary. The Advisory Council on Historic Preservation (ACHP) is notified regarding the project and is provided the opportunity to participate as a consulting party, if they so desire. Interested (federally recognized) Native American tribes, local governments, and other parties are provided the draft materials and are invited to be consulting parties to the agreement document. Once an MOA is executed, the agency may proceed with its undertaking under the terms of the MOA.

During the Draft EIS process, the FTA consulted with VDHR (the SHPO), NPS, the City of Alexandria, and other consulting parties to develop minimization and mitigation strategies, which are discussed in more detail in **Section 6.0: Results**. A draft MOA that outlines those measures is located in **Appendix I**, and will be reviewed by FTA at a later date.

### 3.0 Historic Context

This section describes the historic context of the APE. Historic contexts are patterns and trends in history by which a specific occurrence, property, or site is understood and its meaning made clear. In order to determine if a property is significant, its historic context must first be established (NPS 1990:7).

In particular for the historic period, Mullen and Barse (2008) contains a large and very detailed volume of contextual history for the present project within the former Potomac Yard site, and this context covers the following eight progressive temporal periods of history as defined by VDHR (1999:31, 2011:123–130):

1. Settlement to Society (1607–1750)
2. Colony to Nation (1750–1789)
3. Early National Period (1789–1830)
4. Antebellum Period (1830–1860)
5. Civil War (1861–1865)
6. Reconstruction and Growth (1865–1917)
7. World War I to World War II (1917–1945)
8. The New Dominion (1945–Present)

The comprehensive histories contained in the reports listed above serve as an overarching history for the region around the former Potomac Yard site. The following historic context concentrates on the immediate area of the rail yard property as much as possible.

#### 3.1 Settlement to Society (1607–1750)

Sir Walter Raleigh led the earliest English explorations in the New World when he received a license from Queen Elizabeth in 1584 to search for “remote, heathen and barbarous lands,” but he failed in his attempts to establish a permanent colony (Lillian Goldman Law Library 2008). Despite Raleigh’s lack of success, other Englishmen soon followed in his wake. In 1606, King James I granted to Sir Thomas Gates and other members of the Virginia Company of London the right to settle two colonies or plantations within the area surrounding the Chesapeake Bay and to search for gold, silver, and copper. As a result of this royal grant, three ships departed from England during the spring of 1607: the *Susan Constant*, the *Godspeed*, and the *Discovery*. Under the control of shipmasters Newport, Gosnole, and Captain John Smith, the small fleet arrived at Cape Henry and dropped anchor. The commanders dispatched their ships’ boats on exploratory missions in the Chesapeake and its tributaries. The sailors discovered an island 60 miles up the James River, which the company members selected for establishing a settlement and palisaded fort, which became known as Jamestown, in honor of the King of England (Kelso 1995:6, 7).

To better establish the territory under the Virginia Company’s control, John Smith conducted surveys and prepared a map of the Chesapeake Bay, the Potomac River, and the adjoining territory. Titled *Map of Virginia*, this epic cartographic undertaking provided English citizens a view of Britain’s latest New World colony once Captain Francis Nelson returned to London with the manuscript map. As a result of Smith’s pioneering work, King James I issued a reaffirmation of the Virginia Company’s charter in May 1609 and more clearly defined the charter’s physical boundaries. The map depicted numerous Native American villages and trading centers. Pioneering plantations began growing tobacco, which quickly became the currency or medium of exchange. These plantations became bound to the tobacco economy and grew into independent and self-sufficient entities, resulting in few towns of any notable size developing in Virginia prior to the postbellum industrialization period.

Within 10 years of King James' reaffirmation of the Virginia Company's charter, the blossoming tobacco economy and the fur trade had attracted sufficient numbers of colonists to require regulation and administration. The first Virginia Assembly met in 1619, and by 1621 had enacted laws to regulate the fur trade. In 1623, the Virginia Assembly established the Church of England as the official religion of the colony. By 1630, the 5,000 inhabitants of the colony required administrative subdivision of the four parishes to the north and south of the Rappahannock River (James City, Charles City, Henrico, and Kikotan) into eight shires or counties: James City, Henrico, Charles City, Elizabeth City, Warwick River, Warrosquyoake, Charles River, and Accawmack. Fifteen years later (1645), Northumberland County was delineated to encompass the region between the Rappahannock and Potomac Rivers (Hening 1823 I:352–353). Northumberland County was partitioned into Westmoreland, Stafford, and Prince William Counties; lawmakers then partitioned Fairfax County from the northern part of Prince William County in 1742 (Hening 1819 V:207–208).

Together with the tobacco and fur trade, land speculation provided a powerful engine of development during the settlement period. Prominent and politically connected individuals on both sides of the Atlantic obtained huge tracts of land either as individuals or by pooling their resources with other like-minded friends, family, or associates. James Munson (1987) points out that by the early to mid-eighteenth century, investor interest had already shifted to the Shenandoah and Ohio River valleys, and the Potomac River offered a particularly attractive route to that region. Prior to 1749, Fredericksburg on the Rappahannock River served as the commercial and administrative center for the entire colony, but with the burgeoning population in the tidewater in the northern part of the colony and interest in the Shenandoah and Ohio, petitions began to establish a new port and market town along the Potomac.

Historian James D. Munson's research indicates that the Virginia Assembly received two competing petitions in 1748 to establish a new town on the Potomac in Fairfax County. In the spring of 1749, the assembly chose the northern of the two proposed locations and named it after John Alexander, who in 1658 had patented 6,000 acres in this area. The assembly required 60 acres to be surveyed and lotted within four months. George Washington did not direct the resulting survey, as others claim, but John West, Jr., deputy surveyor of Fairfax County, conducted the work (Munson 1987:12). George Washington did, however, draft a map of the town's lots in 1749 when he was 16 years old, with the town's grid oriented to the Potomac River between Hunting Creek and Four Mile Run (**Figure 3-1**). The Fairfax County seat moved from Spring Field (near the current town of Vienna) to Alexandria in 1752, solidifying the town's preeminence (Hurd 1983:3).

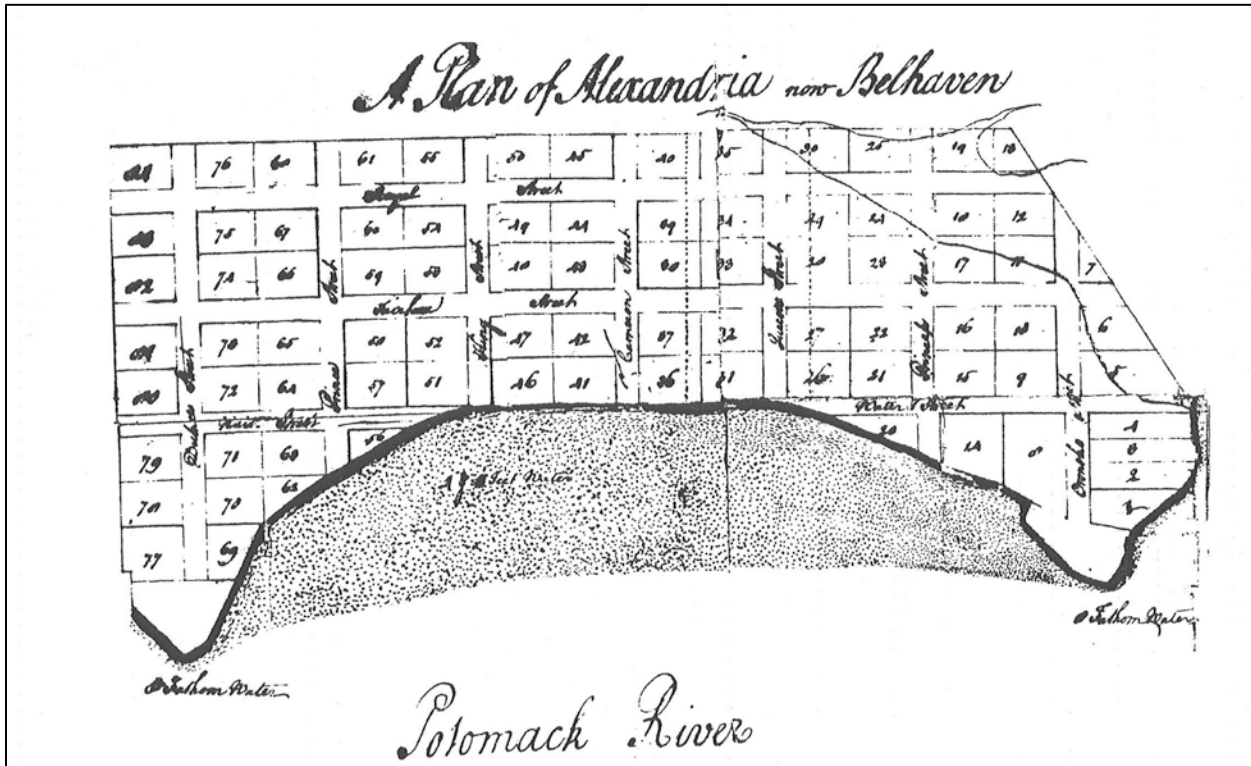
### 3.2 Colony to Nation (1750–1789)

Alexandria quickly developed into a commercial entry point in late colonial maritime trade. Coastal plantations and Piedmont farms shipped tobacco and flour through Alexandria by the 1770s. National and international conflicts at the end of the eighteenth century and beginning of the nineteenth century (including the American Revolution, Napoleonic Wars, and the War of 1812) increased demand for agricultural products, and the Revolutionary War proved to be a boon for agriculture. Demand from competing armies and from foreign markets remained high. Foreign trade provided the greatest outlet for agricultural goods and production remained high during the conflict (Schlebecker 1975:54). The colonies never had to import foodstuffs and the Mid-Atlantic colonies continued to supply New England with food during the war (Schlebecker 1975:56). In comparison, the British had to constantly resupply themselves from the homeland. War inflation allowed farmers to make much more profit than during any prior time period (Schlebecker 1975:35).

Alexandria clearly benefitted from these events. Although technically not one of the "bread colonies" (e.g., Pennsylvania, Maryland, Delaware, New Jersey, and New York), flour milling for overseas export became

an important local industry in Alexandria in the 1780s and 1790s (Smith and Miller 1989:14). The town grew physically. By 1762, the original town grid had been filled with inhabitants, so the General Assembly added the equivalent of 14 city blocks to accommodate the growing center of commerce (Hurd 1983:4).

**Figure 3-1: George Washington's 1749 Map of Alexandria**



Source: Library of Congress, American Memory website, <http://memory.loc.gov/ammem/index.html>, accessed November 26, 2012.

Although not the scene of significant military action, Alexandria, specifically the court house, played a significant part in the political history of the Revolutionary War and the founding of our nation. On July 18, 1774, the court house hosted George Mason, George Washington, and the Fairfax County freeholders, who adopted the "Fairfax Resolves." Probably drafted by Washington and Mason at Mount Vernon the day before, the Fairfax Resolves repudiated British unlimited power over the colonies (particularly as it related to taxation) and defined constitutional rights of colonists. The Fairfax Resolves were one of many such resolves adopted by counties throughout Virginia and the colonies, but they distinguished themselves in being "the most detailed, the most influential, and the most radical" (Broadwater 2006:67).

Locally, within the Potomac Yard area, Robert Alexander's great-grandson Charles Alexander built Preston Plantation between 1750 and 1760 in the northeast corner of a 1,421-acre tract the family owned on the south side of Four Mile Run (Mullen and Barse 2008:31). Authors Mullen and Barse posit that upon completion of the plantation house, tobacco would have been grown on the property. (Mullen and Barse 2008:31).

### 3.3 Early National Period (1789–1830)

The Early National Period brought many changes to Alexandria, the surrounding region, and the new nation, not all of them positive. Initially, this period included volatile economic expansion, which later turned to a financial depression. Between 1783 and 1815, American farmers exploited European markets developed during the Revolution. Europe held a great demand for American produce after 1793 due to the Napoleonic

Wars. Southern states prospered from a dramatic rise in the price of grain and demand for cotton (Schlebecker 1975:72). Grain prices rose dramatically and Southern states prospered from the sale of cotton and labor of African slaves (Schlebecker 1975:72). Price increases were an important part of the growth in the value of the export trade and earnings increased sevenfold in the early 1800s (North 1961:26-27).

As a port, Alexandria benefitted from the expansion of overseas agricultural trade. The city limits expanded in 1796 and again in 1797 (Hurd 1983:4). However, political instability threatened the continued economic expansion. In the Virginia acts of cession of 1789, the new District of Columbia incorporated Alexandria. By 1801, Alexandrians determined this arrangement was not favorable to the city and they sought to be returned to Virginia from 1801 until 1846, when they obtained the necessary approval of their petition. Georgetown was not incorporated into the District of Columbia until 1871. Competition with Georgetown became a major source of discontentment with the annexation of Alexandria into the District of Columbia (Hurd 1983:5).

Whether in fact competition with Georgetown was the source of their problems, larger issues contributed greatly to the economic downturn that Alexandria suffered in the first half of the nineteenth century. Local wealth began to wane as agricultural land played out, farms and plantations were subdivided amongst heirs, and the price of tobacco ceased to rise (Mullen and Barse 2008:26). Overseas trade, while always profitable, became riskier with various embargos and wars. Between 1807 and 1809, when Jefferson signed the Embargo Act, America lost its foreign trade. Prosperity returned between the end of the trade embargo in 1809 and the War of 1812 (North 1961:66), when the Non-Intercourse Act enabled foreign trade with certain nations once again. Nationally, economic expansion returned after the War of 1812 ended, but the United States underwent a significant shift in economic structure during this expansion, moving away from dominance of transatlantic trade and toward the development of an industrial economy that processed its own goods. Alexandria would not benefit directly from this shift, but Alexandrians would try to recapture elements of this trade and the associated wealth.

### 3.4 Antebellum Period (1830–1860)

As early as the 1760s, George Washington, among others, had envisioned a series of canals to bypass the Great and Little Falls on the Potomac River to enhance western commerce (Mitchell 1978:15). By the second quarter of the nineteenth century, improved access to the west had become an imperative, as the pattern of national development turned inward and Georgetown captured an increasing quantity of the Potomac River trade. As Alexandria was still a part of the District of Columbia, it took an act of Congress in 1830 to charter the Alexandria Canal Company to build an artificial waterway from the southern terminus of the Chesapeake and Ohio (C&O) Canal at Georgetown to Alexandria. To accomplish this goal, the Army engineers proposed building a 1,000-foot-long stone aqueduct bridge over the Potomac River on a seven-mile-long Alexandria-Georgetown Canal, which ended on the Potomac at the northern limits of the city. Construction of a second aqueduct bridge would carry the canal over Four Mile Run. Work on the canal began in 1833 and it opened for boat traffic 10 years later (Mitchell 1978:15).

The decade prior to the Civil War also witnessed the construction of a turnpike and three rail lines through Alexandria: the Orange and Alexandria (O&A) Railroad (1854), the Alexandria & Washington (A&W) Railroad (1857), and the Alexandria, Loudon, and Hampshire (AL&H) Railroad (1860). The A&W ran immediately east of the Alexandria Canal and outside the project APE, but the AL&H crossed the southern end of the APE on its route into Alexandria from the north (**Figure 3-2**). The Alexandria, Mount Vernon, and Accotink Turnpike, authorized by the General Assembly in 1856, ran west of the Alexandria Canal (EDAW 1987:20).

Both the canal and rail lines did aid in improving Alexandria's economy, particularly after the C&O Canal Company extended its waterway to the coal fields in western Maryland. Coal became the principal commodity shipped on the canal until it finally closed in the 1920s (Mitchell 1978:23–24). Although the C&O Canal proved successful during the antebellum period, that success came at a price. Mrs. Frances Swann (an Alexandrian through her maternal line), then owner of the Preston Farm, sued the C&O in 1839 for unlawful encroachment on her property. The case reached as far as the United States Supreme Court, who in 1844 awarded her over \$7,000 in damages (Miller 1992). It does not appear that railroad construction in Alexandria caused similar acrimony. The A&W transported people and commodities between Alexandria and Washington and the AL&H ran as far west as Leesburg, in Loudoun County. The O&A connected with several other railroads (Virginia Central Railroad; Virginia and Tennessee Railroad; South Side Railroad; and Manassas Gap Railroad), extending the reach of the line throughout central and southern Virginia. Products from the Piedmont interior found an outlet at the port of Alexandria via this line and its several other rail line connections.

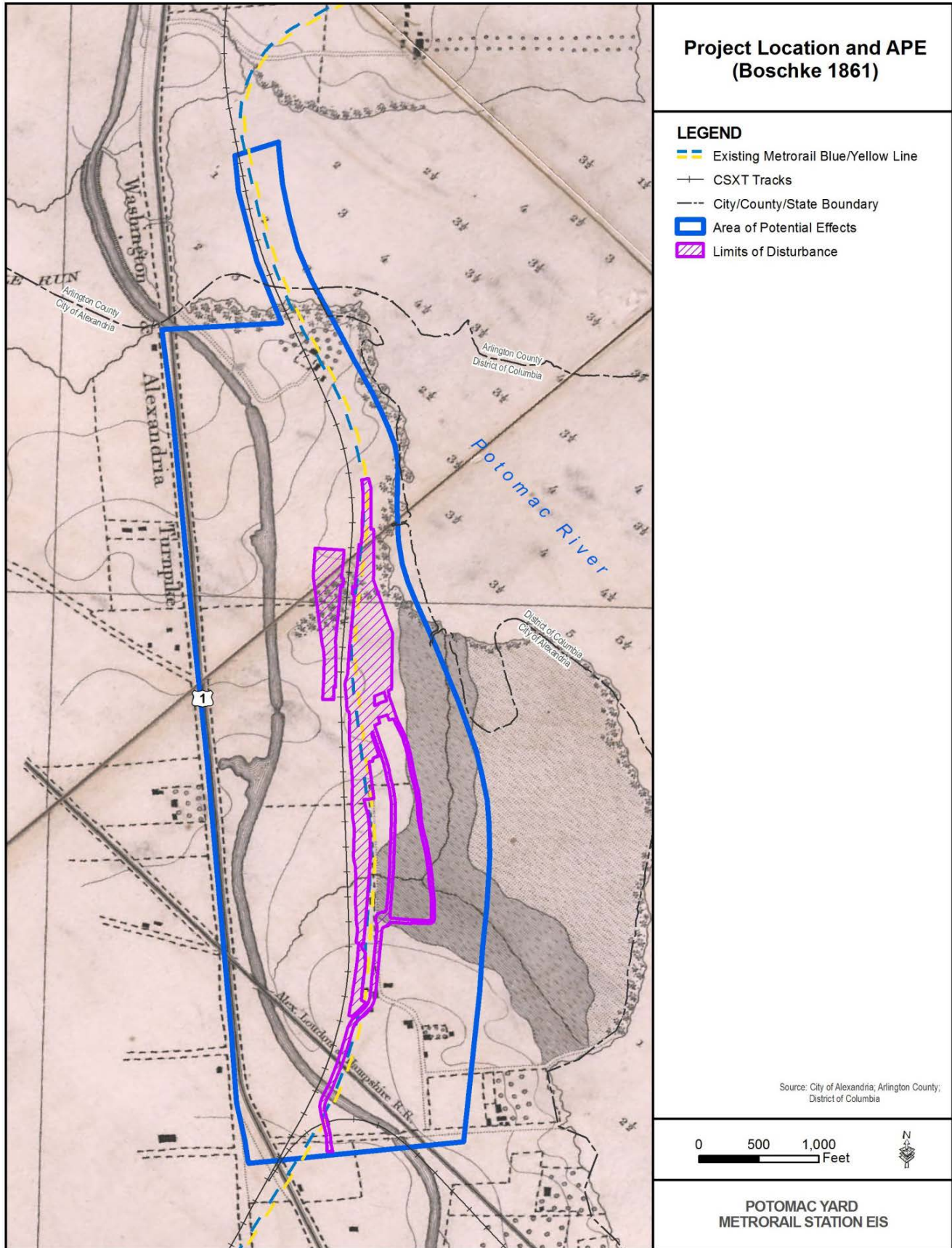
Prior to the Civil War, immigration from northern states and abroad also contributed to improved economic health for the city and environs. Quakers from Pennsylvania took up impoverished farms and worked to bring them back into productivity based largely on diversified agricultural production using the latest “improved” methods and concepts. German and Irish immigrants also expanded the city's and region's population in the 1840s and 1850s. Alexandria became a city on August 4, 1852, and the new city's northern boundary was extended 500 feet (Hurd 1983:6). Ironically, while thousands seeking freedom and opportunity settled in the city and region, Alexandria hosted the largest slave trading business in the nation (Mullen and Barse 2008:27). Despite the ongoing trade in human bondage, half of Alexandria's black residents had attained “free” status by 1860, residing primarily at the southern end of town.

Despite the development that occurred in the vicinity of Potomac Yard, the area remained largely rural and undeveloped—with the exception of agriculture—through the mid-nineteenth century. The 1861 Boschke map (see **Figure 3-2**) depicts the Preston Plantation near the northeast corner of the APE, south of Four Mile Run; two additional properties appear near the southern end of the APE. A small fishing industry flourished near the mouth of Four Mile Run at least until mid-century, but it is unknown whether it survived after the Civil War (Miller 1979).

### 3.5 Civil War (1861–1865)

As with the Revolutionary War that preceded it, the Civil War did not bring direct military action to Alexandria. Union troops arrived in the city on May 24, 1861, and continued their occupation for the duration of the conflict, ending on July 7, 1865 (Hurd 1983:6). “During the Civil War, the O&A was arguably the most fought over railroad in Virginia” (Northern Virginia Community College n.d.). The line offered the most direct rail route from Washington to Richmond and, consequently, throughout the war the Union and Confederate armies fought for control of it. Bivouacs of Union troops on the north side of the city, and the draining of the Alexandria aqueduct over the Potomac to allow wagon and troop traffic across the river were the major changes to the city resulting from the Civil War. Along with these changes, and the Union troops converting Preston Farm into a hospital and burning the house in 1862 (Mullen and Barse 2008:39), Alexandria underwent little change to its physical fabric during the five years of war (Mullen and Barse 2008:39). The influx of Union troops and federal administration of the city certainly changed the social fabric of the community.

Figure 3-2: Project Location and APE (1861 Boschke *Topographic Map of the District of Columbia*)



### 3.6 Reconstruction and Growth (1865–1917)

Alexandria grew slowly in the aftermath of the Civil War. The Alexandria Canal resumed operations after the war, but never returned to financial viability. Coal continued as the principal product shipped, but the canal—plagued by constant need for repair, stoppages due to inclement weather, and competition from the railroads—never recovered its profitability, dooming the enterprise. A sectional collapse of the aqueduct bridge over the Potomac River in 1886 sealed its fate and operations ceased around September of that year (Mitchell 1978:26). Railroads became the preeminent mode of transportation in the 1850's, and after the Civil War experienced consolidation and growth. Federal authorities confiscated the A&W during the war (its owner, James French of Alexandria, was a Southern sympathizer) and sold it after the war; the Pennsylvania Railroad eventually acquired the route in 1872 (Miller 1992:108). By 1894, the AL&H became the Bluemont Branch of the Southern Railway, owned by financier J.P. Morgan (Mullen and Barse 2008:29).

Regardless of changes in transportation and slow but continued urban growth during the reconstruction period, the Potomac Yard area did not appreciably change until after the turn of the twentieth century. The Swann family continued to own the farmland on the south bank of the mouth of Four Mile Run—the old Preston Plantation. By the late 1870s, the Daingerfield (also known as Dangerfield) family owned the farm property immediately to the south, east of the old A&O Canal and west of the Potomac River (**Figure 3-3**). The Daingerfields were a family of successful farmers from Alexandria with prominent social connections (Miller 1992:109).

By the turn of the twentieth century, the burgeoning rail traffic, number of competing rail carriers, and relatively narrow rail corridor between Washington and Alexandria created a transportation bottleneck that all participating operators recognized needed a solution. In 1901, the Pennsylvania Railroad (PRR), Atlantic Coast Line, Southern, Seaboard Air Line, Baltimore & Ohio (B&O), and Chesapeake & Ohio (C&O) created a holding company, the Richmond-Washington Company (R-W), to manage traffic and the single interchange for all north-south rail traffic passing through the area (Carper 1992). The R-W also controlled the Richmond, Fredericksburg and Potomac Railroad (RF&P), which used Potomac Yard as its northernmost terminus. The R-W constructed Potomac Yard to be that interchange.

The largest classification yard in the East, Potomac Yard grew to encompass 536 acres, with 136 miles of track and a capacity to handle 20,000 cars a day (Carper 1992; *Alexandria Gazette* 1906) (**Figure 3-4**). The yard cost \$2 million to construct and it opened for operation on August 1, 1906. The yard's primary function was to classify and sort freight cars from the various operators using the facility (*Alexandria Gazette* 1906). Shortly after the opening of Potomac Yard, two communities to the east of the yard (and the project APE), St. Elmo and Del Rey, merged to form a single corporation, the Town of Potomac (Crabill 1982:15). The Virginia General Assembly approved the incorporation on March 13, 1908. Potomac quickly became known as a railroad town due to the large number of its residents who worked for the area railroads and/or the yard (Crabill 1982:15). From its inception, the town contained members of numerous faiths and likely different ethnic origins. African Americans, however, were the only ethnic group consciously excluded (Mullen and Barse 2008:51).

Figure 3-3: Project Location and APE (1879 Hopkins Atlas of 15 Miles around Washington)

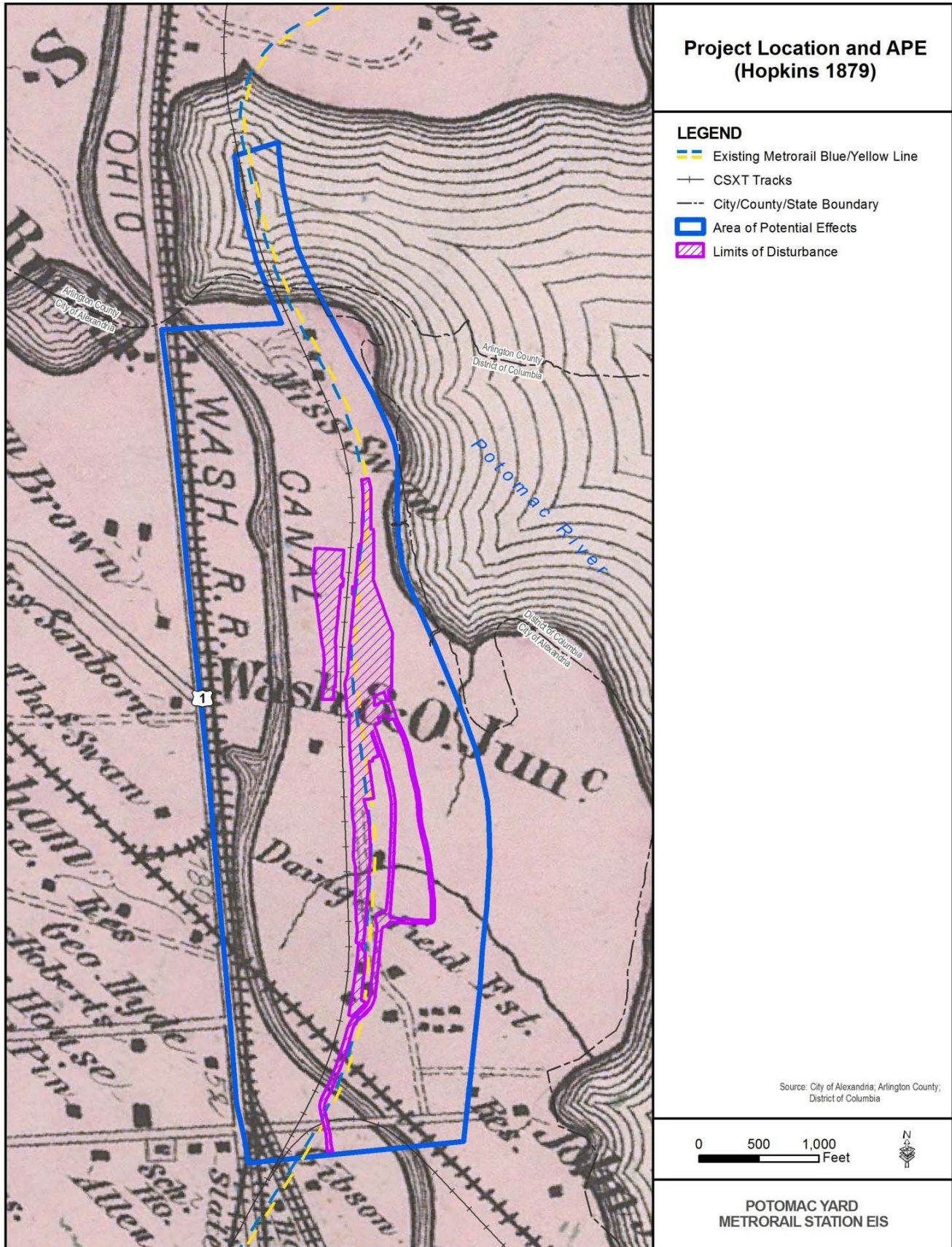
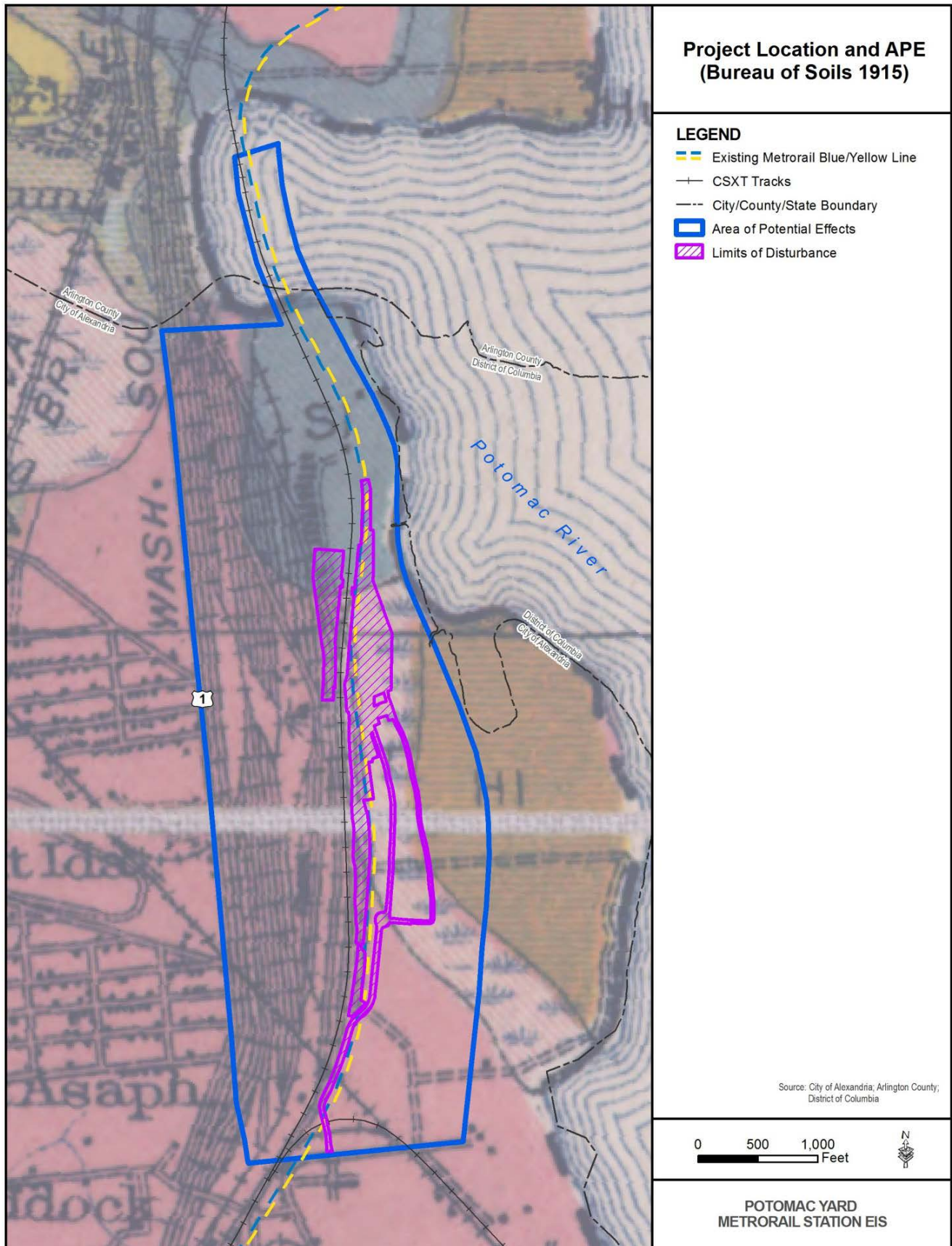


Figure 3-4: Project Location and APE (1915 Bureau of Soils Map)



### 3.7 World War I to World War II (1917–1945)

Just prior to World War I, the City of Alexandria annexed 500 acres of Alexandria County and 450 acres of adjacent Fairfax County, growing northward to the project area location. Likewise, in 1929, the city annexed all land south of Four Mile Run, including the Town of Potomac (Hurd 1983:7). Between 1929 and 1932, the federal government funded and built the first parkway in the United States, the Mount Vernon Memorial Parkway (now the GWMP), east of Potomac Yard (EDAW 1987). Construction of the GWMP began a period of federal involvement in road construction that continues to this day, but during the decade leading up to World War II, Congress justified the expenditure of federal highway dollars by the need for national defense (Leach 1991).

Rail transport of agricultural products northward and manufactured goods southward through Potomac Yard continued to be important during World War I, the interwar years, and particularly throughout World War II, when rail traffic increased by 96% between 1940 and 1943, and the yard received an additional 11.5 miles of track to accommodate the traffic increase (Mullen and Barse 2008:55). Wartime expansion brought increased residential building primarily west of Potomac Yard, but also brought growth to the east, including Abingdon Apartments.

Wartime expansion, however, masked the effects of structural changes that were occurring in the rail industry beginning in the 1930s. Changes in rail technology beginning around 1930 reduced the number of rail workers needed for the Potomac Yard's operations. The introduction of remotely operated switches and pneumatic brake car retarders, for example, reduced the need for brakemen (Carper 1992; Mullen and Barse 2008:55). Reduced demand for rail workers, an increased regional demand for office workers, and the 1941 construction of the nearby Pentagon building would begin to change the nature of the communities surrounding Potomac Yard.

### 3.8 The New Dominion (1945–Present)

The immediate postwar period witnessed a cascade of increasing technological efficiencies in the Potomac Yard's operations: "the [Potomac] Yard was at the forefront of modernization" (Carper 1992:33). Railroads gradually phased out steam locomotives in favor of either electric or diesel engines. Catenary lines covered the entire northern half of the yard, and new repair and administrative buildings supplanted facilities once dedicated to the maintenance of steam engines. A new control tower and electronic systems allowed for semi-automatic car-routing control. The advent of the diesel locomotive doomed the extensive steam facilities, and improved communications technology replaced much of the manual paperwork and mechanical car-handling procedures. Potomac Yard thus found itself able to handle more operations with fewer resources (Carper 1992:35). During the 1950s, the U.S. Congress granted \$30 million for flood control of Four Mile Run and established an intermodal yard on the east side of Potomac Yard to facilitate interconnections with the growing use of highways for transportation (Carper 1992:34).

Across the nation, as automation increased and the demand for labor decreased at the yard, changes in the rail industry reduced the need for facilities like the Potomac Yard. The factors identified as responsible for its eventual decline during the 1960s and 1970s include the use of the mechanical refrigeration car (negating the need for the Potomac Yard's icing facilities), the sequence of mergers that obviated the need for classification of freight from different companies, passage of the Railroad Revitalization and Regulatory Reform Act in 1976 (creating Conrail) with a reduction in freight service, the creation of CSX (which did not require car classification at Potomac Yard), labor strikes and accidents, as well as the sale of property for development (Carper 1992; RF&P Railroad Company 2006; Mullen and Barse 2008). The Potomac Yard ceased operation in 1990. Large-scale, corporate development has dominated the former lands of the old Potomac Yard and lands surrounding it. The RF&P sold land that it owned north of Four Mile Run to a real

estate company that built Crystal City (Mullen and Barse 2008:56). Other development on the site of the yard includes the Potomac Yard Shopping Center, a retail space utilizing 589,856 square feet of former Potomac Yard land, completed in 1997. Additional sections of Potomac Yard have since been slated for development as residential units, office space, parkland, and for retail use. Currently, there are six development projects either completed or under construction in and around the former Potomac Yard site (City of Alexandria 2012).

## 4.0 Survey Findings

Three NRHP-listed transportation-related resources are located in the APE. Two additional resources in the APE that were not identified during the background research phase were identified during the identification and consultation phases: one is a landscape recently determined eligible for listing in the NRHP as a contributing resource to the MVMH/GWMP; the other is a historic architectural resource being treated as eligible for listing in the NRHP for the purposes of this undertaking.

### 4.1 NRHP-Listed Historic Properties in the APE

VDHR files indicate three interrelated NRHP- and VLR-listed resources located within the APE: George Washington Memorial Parkway (GWMP), Mount Vernon Memorial Highway (MVMH), and the Parkways of the National Capital Region, 1913–1965 (PNCR). The GWMP encompasses the entire 38.3-mile scenic parkway from Mount Vernon to Great Falls. The MVMH refers to the original southern segment of the GWMP between Arlington Memorial Bridge (at the north) and George Washington’s home, Mount Vernon, at the south (**Figure 4-1**). As parkways built in the National Capital Region between 1913 and 1965, both the MVMH and GWMP are also a part of the PNCR multiple properties submission (MPS). **Table 4-1** provides summary information, and **Appendix A, Plates 1 through 4**, provide photos of the resources. For the full NRHP nominations, see **Appendix C, Appendix D, and Appendix E**. See **Appendix F** for a background history on the Greens Scenic Area Easement

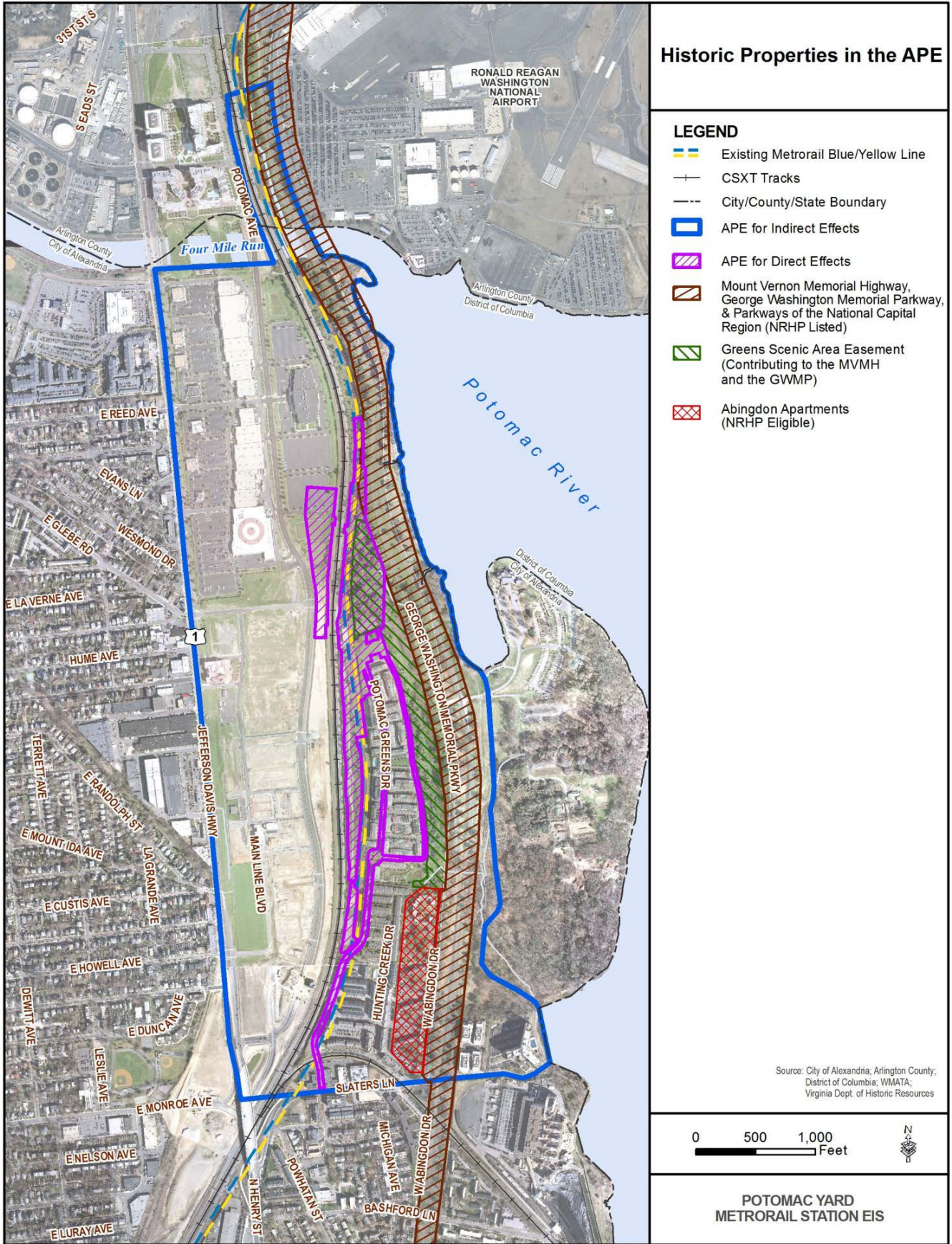
**Table 4-1: NRHP-Listed Historic Properties in the APE**

Name	Location	Description	Federal/State Listing Status	NRHP/VDHR ID#	Area/Period of Significance
Mount Vernon Memorial Highway (MVMH)	Extends 15.2 miles from Arlington Memorial Bridge in Arlington County, VA, south to Mount Vernon in Fairfax County, VA	The MVMH is a parkway designed and landscaped to maximize scenic, aesthetic, and commemorative qualities between the District of Columbia and George Washington’s home at Mount Vernon. Features include native and ornamental plantings, bridges, and monuments intended to commemorate the bicentennial of George Washington’s birth. The MVMH opened in 1932.	NRHP Listed: 5/18/1981 VLR Listed: 3/17/1981	NRHP: 81000079 VDHR: 029-0218	Association with the life of George Washington ( <b>Criterion B</b> ); Transportation engineering, landscape architecture, and sculpture ( <b>Criterion C</b> ); and a resource commemorative in intent ( <b>Criterion Consideration F</b> ). Period of Significance is 1929-1932.

Name	Location	Description	Federal/State Listing Status	NRHP/VDHR ID#	Area/Period of Significance
George Washington Memorial Parkway (GWMP)	Extends 38.3 miles along the Potomac River from Great Falls, Virginia and the Capital Beltway/Interstate 495 in Fairfax County, VA south to Mount Vernon in Fairfax County, VA	The GWMP is a nationally-significant scenic transportation corridor linking Mount Vernon with Great Falls on the Potomac. It also preserves invaluable historic, recreational and natural resources along the Potomac River Valley and has strongly influenced parkway and highway design throughout the United States. The GWMP was completed in 1970.	NRHP Listed: 6/2/1995 VLR Listed: 10/8/1991	NRHP: 95000605 VDHR: 029-0228 (See also HAER VA-69)	Association with the life of George Washington ( <b>Criterion B</b> ); Transportation engineering, landscape architecture, and sculpture ( <b>Criterion C</b> ); and a resource that has achieved significance within the past 50 years ( <b>Criteria Consideration G</b> ). Period of Significance is 1930-1966.
Parkways of the National Capital Region, 1913-1965 (PNCR)	Includes both the MVMH and GWMP	A collection of landscaped parkways that serve as a link among the parks, monuments, and suburbs of the national capital region, with features that include scenic overlooks, hiking/biking trails, picnic/parking areas, native and ornamental plantings, and formal monuments. Includes both the MVMH and GWMP as well as the Baltimore-Washington Parkway, Suitland Parkway, and Rock Creek and Potomac Parkway	NRHP Listed: 6/2/1995 VLR Listed: 10/8/1991	NRHP: 64500086 VDHR: 029-5524	Nomination does not specify significant criteria, but this report assumes that the criteria mirror those listed above for GWMP and MVMH.

Source: VDHR Archives, and NRHP website (March 2012).

Figure 4-1: Historic Properties in the APE



## 4.2 NRHP-Eligible Historic Properties in the APE

The Greens Scenic Area Easement was identified during the background research stage as a property easement administered by NPS and located adjacent to, but outside, the boundaries of the NRHP-listed MVMH, GWMP, and PNCR. Through direct consultation with the Keeper of the National Register, the parcel was determined NRHP eligible on March 17, 2015 as a contributing resource to the MVMH and GWMP, notable for its undeveloped natural and scenic character (see **Appendix A, Plates 5 and 6**).

An intensive-level historic architectural survey conducted in the project area identified the Abingdon Apartments, currently named Potowmack Crossing at Old Town Condominiums, as a historic architectural resource in the APE. This resource requires further research to determine if it qualifies for listing in the NRHP as an associated property type of a Colonial Revival Apartment Complexes of Alexandria (CRACA) MPD, a study yet to be undertaken (**Table 4-2** and **Appendix A, Plates 7 and 8**). See **Appendix B** for the Reconnaissance Level Survey Form containing the full eligibility assessment. FTA has agreed to treat the Abingdon Apartments as eligible in lieu of conducting additional research on the potential MPD at this time.

**Table 4-2:NRHP-Eligible Historic Properties in the APE**

Name	Location	Description	Federal/State Listing Status	NRHP/VDHR ID#	Area/Period of Significance
Greens Scenic Area Easement	West and immediately adjacent to the George Washington Memorial Parkway in the City of Alexandria, VA	20.54-acre easement on open land characterized by low marshy wetlands and uplands, as well as trees and other vegetation	Determined Eligible as a contributing resource to the MVMH/GWMP on March 17, 2015	N/A	<b>Criterion C</b> for its historic scenic qualities and undeveloped natural character that contributes to the original design of the MVMH
Abingdon Apartments (eligible as part of CRACA)	Northwest corner of the intersection of GWMP/MVMH and Slaters Lane, City of Alexandria	Circa 1942-1945 Colonial Revival garden-style apartment complex	No official status. FTA and VDHR agreed to treat it as eligible for the purposes of this undertaking only.	VDHR: 100-5264 (assigned for Reconnaissance Level Survey Form)	<b>Criterion A</b> for its association with post-WWII development in Alexandria and <b>Criterion C</b> as a Colonial Revival-style apartment complex

Source: Field Investigation (November 2012) and NPS correspondence (March 2015).

## 4.3 Locally Recognized Historic Resources

City of Alexandria and Arlington County files indicate one locally recognized historic district within the APE: the Old and Historic Alexandria District (OHAD) (see **Table 4-3** for details). There are no other locally recognized historic districts or designated landmarks in the APE.

The OHAD is a locally regulated zoning district that includes a large part of downtown Alexandria and extends north to Four Mile Run (Alexandria city limit) to include the GWMP and 500 feet on either side of the centerline of the GWMP. The district “was originally established to control development along the GWMP as it passes through the City as Washington Street and to protect the City’s colonial heritage” (City of Alexandria 2012). Any project that falls within the district is subject to review and approval by the OHAD Board of Architectural Review (BAR).

**Table 4-3: Locally Recognized Historic Resources in the APE**

Name	Location	Description	Federal/State Listing Status	NRHP/VDHR ID#	Area/Period of Significance
Old and Historic Alexandria District	Downtown Alexandria and north along the GWMP/MVMH to the city limit at Four Mile Run	City of Alexandria zoning district established through a Memorandum of Agreement (MOA) between the City and the Bureau of Public Roads in 1929 to protect the aesthetic quality of buildings along the GWMP/MVMH	Not listed in the NRHP or VLR	None	Unspecified

Source: City of Alexandria website (March 2012).

The OHAD was not evaluated for NRHP eligibility as part of this investigation because its boundary overlaps with two existing NRHP-listed resources (MVMH and the Alexandria Historic District) that, combined, are significant for the same historic associations and architectural building types as the OHAD. The MVMH is significant for its association with the life of George Washington and for engineering and landscape architecture. The Alexandria Historic District is significant as one of the largest concentrations of “late eighteenth and early nineteenth century urban architecture in the state” (Alexander 1969). The OHAD was established to maintain the architectural character of the City of Alexandria and the memorial character of the parkway. Because the majority of the OHAD is already listed in the NRHP, evaluating its eligibility for this project would be a redundant effort. The only portion of the OHAD that falls outside the two NRHP-listed districts is much of OHAD’s 500-foot buffer that extends from either side of the centerline of the MVMH. A review of background information, including original planting plans, did not reveal any evidence that suggests the buffer is directly related to historic features or the design intent of the MVMH. As a result, the OHAD is not considered a “historic property” for this Section 106 study, nor were the effects of the project on the district evaluated.

## 4.4 Description of Historic Properties

### 4.4.1 Mount Vernon Memorial Highway

The MVMH, the original and southernmost segment of the GWMP, was opened to traffic in 1932. Linking George Washington’s former home, Mount Vernon, in Fairfax County with the Arlington Memorial Bridge, the 15.2-mile span was designed and landscaped to maximize scenic, aesthetic, and commemorative qualities. Integral to its character and significance, numerous national monuments, historic sites, parks, and other landscaped green spaces are visible along the corridor.

As the first parkway built and maintained by the U.S. government, the MVMH is nationally significant. In addition to its association with the life of George Washington (Criterion B), the MVMH is significant in the areas of landscape architecture, engineering, sculpture, and transportation (Criterion C). The MVMH was listed in the NRHP on May 18, 1981, and in the VLR on March 17, 1981. The period of significance for this listing is 1929–1932.

The parkway system in the Washington, D.C. area grew out of the turn-of-the-twentieth-century City Beautiful movement. New York and Boston already possessed urban park systems that included

parkways—essentially a linear park for foot and vehicular traffic. The 1902 McMillan Plan, a product of Senator James McMillan's commission, proposed a number of parkways connecting Great Falls, Mount Vernon, the various Potomac River bridges, and existing parks. The introduction of automobiles soon had a dramatic effect on the effort to improve existing roads and in planning new highways. Suburbanization, formerly the realm of the railroad and streetcar lines, suddenly had a new ally in the motor vehicle. One of the planned parkways extended down the west side of the Potomac River in Virginia from Washington to Mount Vernon. Congress approved authorizing legislation in May 1928 to build the new Mount Vernon Memorial Highway as a bicentennial commemoration of George Washington's birthday. Two years later, Congress determined that the highway should be extended on both the north and south ends: to Great Falls on the north and to Fort Washington on the south. Two years later, federal officials renamed the entire highway the GWMP (Leach 1991:E14).

Gilmore Clarke, a consulting landscape architect for the original highway design, reported that the 13-mile-long Bronx River Parkway in New York, completed in 1923, exerted great influence over the Mount Vernon Memorial Highway:

I doubt whether the Mount Vernon Memorial Highway would have been built in the manner in which it was, had those in charge not seen and profited by the work of the Westchester County Park Commission. And so Washington has one example of the type of motorway that should... extend out from every portal of the city (Clarke 1938).

Clarke proceeded to draft design standards for the project, as well as develop appropriate details for the design work. He rejected bridge designs prepared by the Bureau of Public Roads because they did not reflect a simple design. Clarke prepared new bridge designs and the Commission of Fine Arts approved his work exactly as submitted. The Bureau of Public Roads engineering staff, led by Wilbur Simonson and R. E. Toms, provided the day-to-day design guidance and execution. Simonson held the responsibility of executing the designs Clarke submitted. Simonson also oversaw the actual landscaping work, establishing a temporary nursery at the Potomac Yard on Daingerfield Island for growing the necessary trees, shrubs, and ornamental plants for the new highway (Leach 1991:E15).

In 1932, Simonson created a landscape design that provided a varied experience for motorists driving along the route. For example, Memorial Circle (or Alexandria Circle) featured formal plantings, while the design for the approaches to the circle comprised much looser symmetrical landscaping in a purposeful attempt to focus attention on the circle and its landscaping. The Daingerfield Island section of the parkway displayed a completely different asymmetric design. Simonson directed the planting of soldiered and grouped vegetation along the parkway's western line, consisting of shrubs and trees, to form a thick vegetative natural screen between the parkway and the Potomac Yard. Through the same section, the parkway's eastern side features minimal vegetation, providing a more open design for views across the island to the Potomac—the first of several views across river for northbound travelers (National Park Service 2009:24, 30) (see **Appendix A, Plates 9 and 10**). Simonson's design for the eastern view included widely spaced willow trees in the southerly portion of the section, with American elm, wych elm, and hackberry installed much closer to the road, creating a framed view in combination with the willows, the river, and the capital city beyond. Through the parkway's Daingerfield Island section, the adjoining terrain is lower than the roadway with predominately wet soils, which limited the planting selections. Simonson selected vegetation that could withstand flooding and continuously wet conditions. As a result, the parkway's western view included a thick natural screen to separate the parkway from the Potomac Yard. Groves of amur cork trees and Sargent's crabapples stand in the foreground, denoting the transition from a balanced ecology to the wet soils of the Daingerfield Island area. In areas where Simonson sought to accentuate views of the Potomac and the capital, he framed the vegetative openings with low shrubbery dominated with roses (National Park Service 2009:42–49).

The Bureau of Public Roads oversaw construction of the first 15.5 miles of the Mount Vernon Memorial Highway, employing aerial photographs for the first time in laying out the roadway. Writing about the highway, NPS historian Sara Amy Leach notes:

From Mount Vernon to Alexandria, the four-lane, undivided road clings to the shoreline it protects, from thickly wooded sections to open, grassy embankments and marsh; occasional overlooks and park/parking areas provide points for picnicking and occasional views to Fort Washington across the river. In contrast, the route from Alexandria to the bridge is divided by a median, open and manicured. This portion also contains several formal monuments—the Columbia Island Circle at the junction of the bridge, the Navy-Marine Memorial, and the LBJ Memorial Grove—the backdrop to which is an ongoing vista of the magnificent Washington skyline. In recent years the parkway has been augmented by a bicycle/pedestrian path of complementary winding character (Leach 1991:E15).

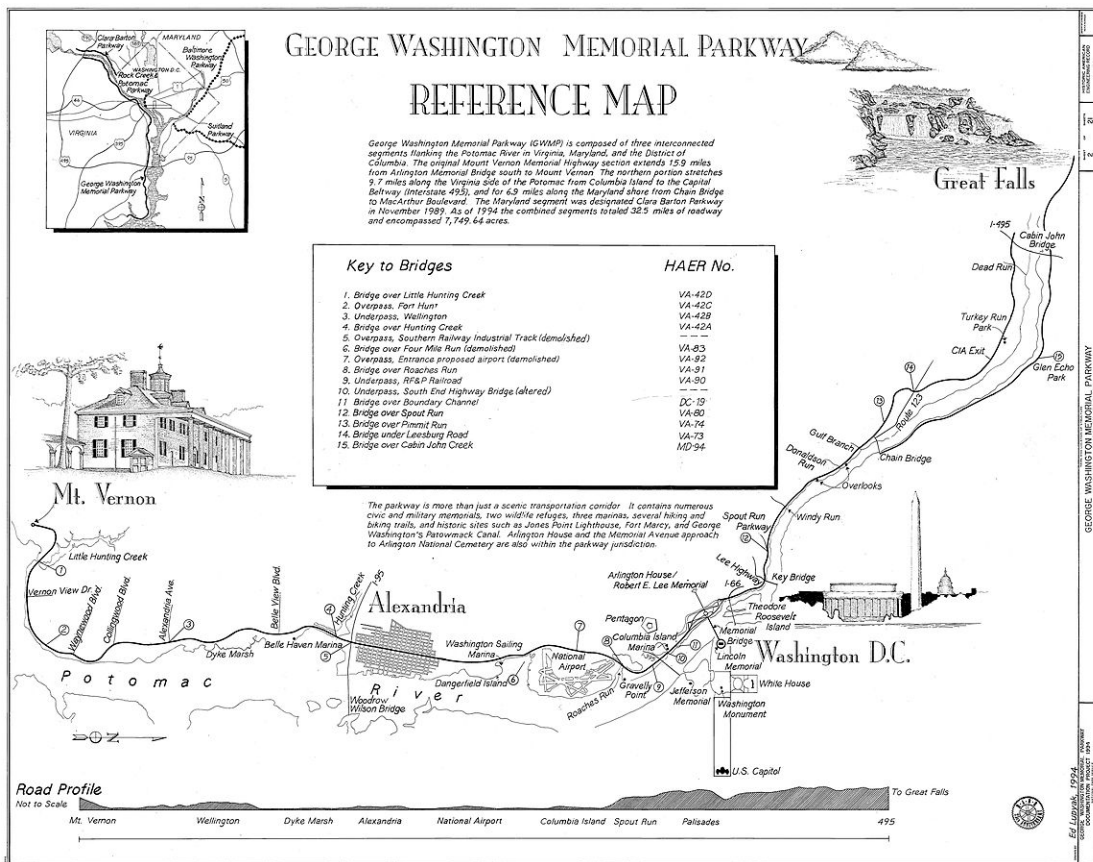
The MVMH/GWMP is the first parkway that the federal government designed and constructed. The parkway's distinctive design elements include stone-faced arch bridges, beveled curbing, and high-quality landscaping (Mackintosh 1980:8-1).

#### **4.4.2 George Washington Memorial Parkway**

The GWMP stretches 38.3 miles from its southern terminus at Mount Vernon to Great Falls at the northern terminus. It is composed of three interconnected segments: the original MVMH section (see **Section 4.4.1**, above) that extends from Mount Vernon to the Arlington Memorial Bridge, the northern section that extends from the Arlington Memorial Bridge north to Capital Beltway (Interstate 95), and the Maryland segment—designated the Clara Barton Parkway—that runs along the Maryland shore from Chain Bridge to MacArthur Boulevard. Along its route are many contributing landscape features, including retaining walls, barrier walls, culverts, drop inlets, and bridges, in addition to the civic and military memorials and other historic and natural sites that border it (see **Figure 4-2** on the following page).

The entirety of the GWMP stands as one of the premier examples of parkway design in the country. Like the MVMH segment discussed above, the GWMP is nationally significant for its landscape design (Criterion C) as well as for its commemoration of George Washington, and more recently, Clara Barton (Criterion B). The GWMP was listed in the NRHP on June 2, 1995, and in the VLR on October 8, 1991. Its period of significance is 1930–1966. The NPS is currently updating the GWMP NRHP nomination, but because the effort is ongoing, this report uses the 1995 GWMP nomination on file with the NRHP.

**Figure 4-2: Historic American Engineering Record's George Washington Memorial Parkway Reference Map**



Source: Library of Congress, Prints & Photographs Division, HAER, HAER No. VA-69.

Congress authorized the creation of the GWMP before the MVMH was completed. The proposal for the parkway called for the creation of parkways on both sides of the Potomac River from Mount Vernon upstream to Great Falls. As with the MVMH, advocates for the GWMP secured congressional approval by combining patriotic appeals with concerns for natural resource protection, recreation, and transportation. The 1930 Capper-Cramton Act authorized the expenditure of up to \$9 million to provide for the comprehensive development of parks, parkways, and playgrounds in Washington, D.C., and adjacent areas of Maryland and Virginia, with \$7.5 million allocated directly for GWMP. The Historic American Engineering Record (HAER) report for the GWMP states:

The act authorized appropriations of up to \$7.5 million for the creation of George Washington Memorial Parkway, which would include the shores of the Potomac, and adjacent lands, from Mount Vernon to a point above the Great Falls on the Virginia side, except within the city of Alexandria, and from Fort Washington to a similar point above the Great Falls except within the District of Columbia, and including the protection and preservation of the historic Patowmack Canal, and the acquisition of that portion of the Chesapeake and Ohio Canal below Point of Rocks (HAER No. VA-69:146).

The appropriations were dependent, however, on the states of Maryland and Virginia both providing matching funds—a contingency that contributed to the stalled development of the parkway over a period of 40 years. Following an extensive series of land transfers, land acquisition, and additional congressional appropriations, the northernmost segment of the GWMP on the Virginia side was completed in 1962. The development of the final segment, along the Maryland side of the Potomac River, was perhaps the most

protracted. It began with the donation of a few private tracts of land in the 1930s and ended with the paving of the short stretch between the district line and Chain Bridge in June 1970. Most recently, the GWMP between MacArthur Boulevard and Canal Road was officially renamed the Clara Barton Parkway on November 28, 1989.

#### 4.4.3 Parkways of the National Capital Region, 1913–1965

The Parkways of the National Capital Region, 1913–1965 MPS comprises approximately 75–100 miles of parkways in the District of Columbia; Montgomery, Prince George's, and Anne Arundel Counties in suburban Maryland; and Arlington and Fairfax Counties, along with the City of Alexandria, in northern Virginia. According to the NRHP nomination:

The various parkways of the national capital reflect the culmination of several national trends after the turn of the century: the City Beautiful movements' emphasis on integrated urban green space; automobility and the rapid development of the road systems; and the decline in the quality of city living and resulting popularity of outdoor recreation... Aesthetically unaltered, the parkways remain vital components of the regional transportation arteries and they continue to contribute to the historic symbolism and design of the nation's capital.

The boundaries of the contributing arterial thoroughfares are coterminous with their rights-of-way, and in the APE include the MVMH and GWMP. The period of significance is 1913–1965.

#### 4.4.4 Greens Scenic Area Easement

While historically not a part of the MVMH or GWMP, the Greens Scenic Area Easement was determined eligible for the NRHP as a contributing resource on March 17, 2015, due to its historic scenic qualities that contribute to the original design of the roadway and its landscape (see **Appendix F** for a comprehensive background on the Greens Scenic Area Easement and **Appendix G** for the determination of eligibility).

The Greens Scenic Area Easement encompasses 20.54 acres of open, undeveloped land owned by the City of Alexandria and administered by NPS. It is located to the north and east of the Potomac Greens neighborhood along the GWMP and comprised of emergent wetland, forested wetland, and upland treed area habitats. An easement was established in 2000 for the purpose of conserving and preserving the natural vegetation, topography, habitat, and other natural features within its boundaries.

The origins of the Greens Scenic Area date back to 1938, when an indenture was granted to allow operation of the Potomac Yard railroad yard on the land parcels. A portion of the original rail yard had been constructed on fill over waters of the United States, thus requiring approval from the federal government in order for non-rail uses to occur. In 2000, as part of an agreement to allow redevelopment of the Arlington portion of Potomac Yard, the owner of the property granted a perpetual scenic easement (known as the Greens Scenic Area) to the United States Department of the Interior for much of the land to the north and east of the Potomac Greens neighborhood and east of the Metrorail tracks. The easement also reserves the City's right to develop the property for exclusively recreational purposes, with approval from NPS.

#### 4.4.5 Abingdon Apartments

Abingdon Apartments (now the Potowmack Crossing at Old Town condominiums) is a Colonial Revival garden-style apartment complex located on West Abingdon Drive (approximately 100 feet west of the GWMP roadway) that was constructed in 1942–1945 (Hill Directory Company, Inc. 1958:106). Abingdon Apartments is a previously undocumented resource greater than 50 years of age that was identified within the proposed APE for historic architecture.

Abingdon Apartments includes five Colonial Revival–style buildings, four v-shaped buildings, and one c-shaped building. The apartments are three stories, brick-faced, and have a combination of flat and hipped roofs clad in a mixture of asphalt shingles and slate tiles. The buildings exhibit a number of Colonial-style details, including brick quoins, 6/6 double-hung sash windows (synthetic sashes have replaced the original metal sash windows) with inoperable shutters, hipped roofs, and broken pediment door surrounds. The Abingdon Apartments, with its red brick, Colonial style door surrounds and cupolas, was named for the Abingdon, the eighteenth-century Alexander-Custis Plantation located along on the grounds of Ronald Reagan Washington National Airport.

Abingdon Apartments is one of a collection of garden-style apartment complexes constructed in the City of Alexandria during the late 1930s and 1940s to accommodate a growing population of wartime workers and, subsequently, veterans returning from the war effort (Criterion A). Most of the apartments were designed in the Colonial Revival style, which emerged after the Centennial Exposition of 1876 as the result of a renewed interest in the nation’s history (Criterion C). The movement gained momentum in the early twentieth century with the advent of the automobile, which enabled Americans to visit many of the country’s historic sites. This was especially true in Alexandria, where the GWMP was constructed in 1932 to commemorate George Washington’s bicentennial birthday.

Arlington County received its first garden apartment complex in 1935, when Gustav Ring constructed the first phase of Colonial Village from architectural plans that Harvey H. Warwick Sr. and Francis Koenig prepared. Ever the entrepreneur, Ring observed a critical housing shortage during the Great Depression. He succeeded in obtaining an FHA-insured mortgage to build the rental-apartment complex designed within a park-like setting on a 50-acre site at Wilson Boulevard and North Taft Street in Arlington County. Ring offered his renters amenities and many comforts. The complex stood a short 10-minute bus ride from downtown Washington. The first phase comprised 276 apartments, which quickly had a 10,000-person waiting list. Management completed the third and final phase of construction in 1955 and the complex then contained 974 rental units (Moffett 2002:16–17).

As the United States geared up for war production in the late 1930s, housing for war workers proved daunting. In 1940, the Defense Homes Corporation (DHC), a federal agency, incorporated to address housing needs. Beginning in 1943, this agency constructed Fairlington in Arlington County and near the boundary with the City of Alexandria. This complex was the only multi-family housing that the DHC constructed in the immediate area. Designed in the popular Colonial Revival style, the housing units covered 322 acres. DHC completed construction in August 1944, resulting in 3,439 rental units becoming available for war workers. Occupancy remained full with a large waiting list (Moffett 2002:22).

Privately funded garden-style apartments were constructed in Alexandria as well and continued to be constructed in Alexandria during and following World War II, since the District of Columbia continued to grow in population. The Abingdon Apartments complex dates to 1942 (Hill Directory Company, Inc. 1958:106). In 1948, the Metropolitan Insurance Company, seeking to create a low-density complex, acquired 200 acres and constructed the Parkfairfax complex in northwest Alexandria; the buildings, when completed, covered less than 10 percent of the total property (*The Evening Star* 1948:B1).

While Abingdon Apartments falls within two historic contexts that are significant under Criteria A and C, the complex lacks the individual architectural or historic significance to be considered eligible as an individual resource (see **Appendix B** for the Reconnaissance-Level Survey Form containing the full eligibility assessment). The complex is a typical and generally unremarkable example of the Colonial Revival style and does not exhibit any particularly noteworthy characteristics of the type or style. Despite these findings, research and field investigation indicate that Abingdon Apartments may be eligible as a representative associated property type under a multiple property designation of Colonial Revival–style/garden-style

apartments in Alexandria from the second quarter of the twentieth century. Development of a sufficient historic context(s) to make a determination of eligibility based on being a significant example of an MPD Association Property Type is outside the scope of this project.

However, following VDHR's review of the aforementioned report—as well as the Reconnaissance Level Survey Form—they suggested that Abingdon Apartments be treated as potentially NRHP eligible and in lieu of gathering additional research on the potential MPD, VDHR and FTA agreed to treat the Abingdon Apartments as NRHP eligible for the purposes of this Section 106 review for this undertaking.

Background research revealed no indication that the complex is associated with persons significant in the past (Criterion B), and there is no indication that the complex yields or may be likely to yield information important in history or prehistory (Criterion D).

#### 4.5 Historic Property Boundary Discrepancies

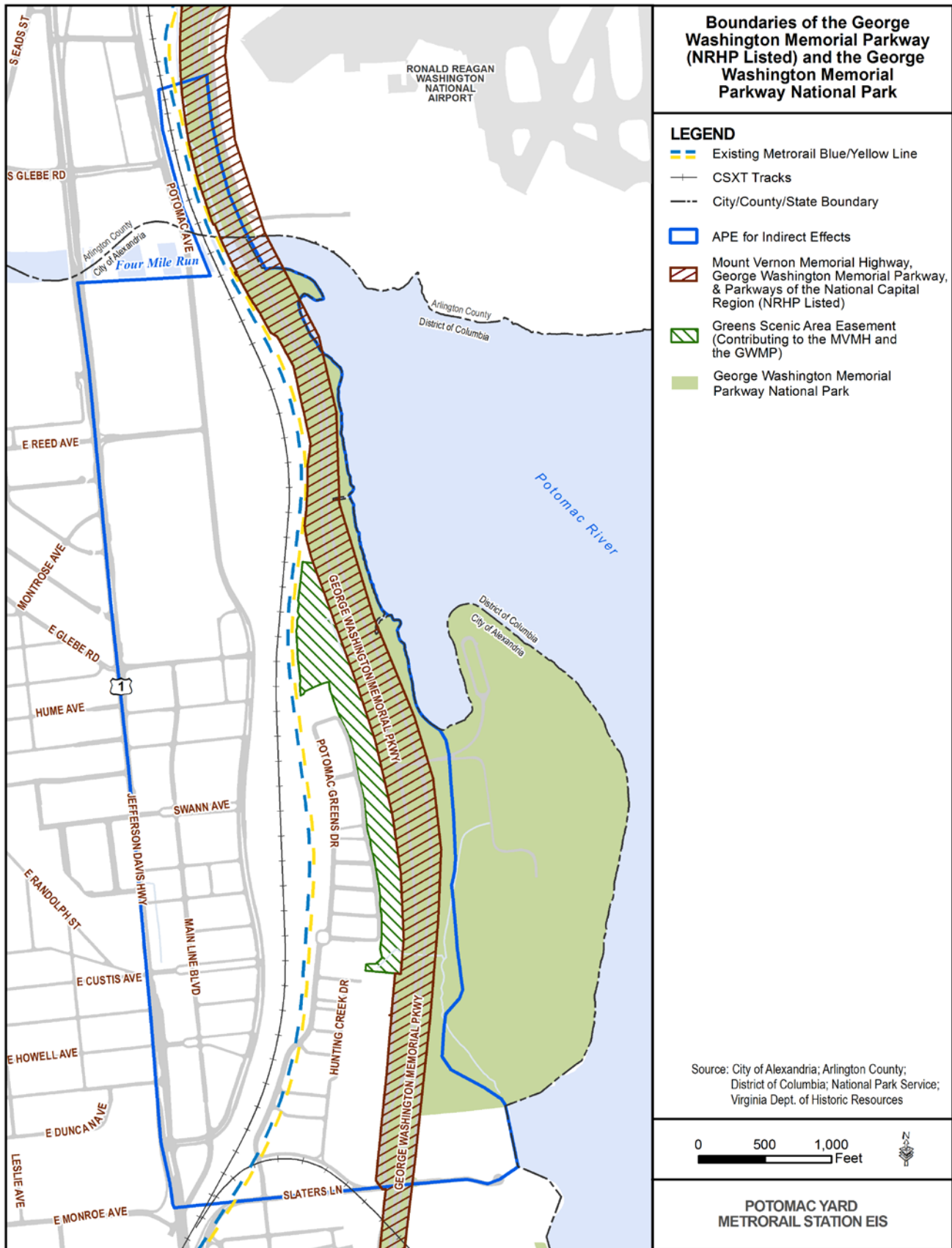
This section distinguishes the nomenclature and boundaries of several related historic properties in the APE and notes apparent discrepancies among the references in their source documents.

##### 4.5.1 Mount Vernon Memorial Highway and George Washington Memorial Parkway

The MVMH (as described above) was opened for traffic in 1932 and was the first (and southernmost) segment of what would become the GWMP. The year MVMH opened, the name was changed to the GWMP, and over the subsequent 30 years (1933–1966) was expanded north and into Maryland. The boundaries of the NRHP-listed MVMH resource (as depicted in the 1981 NRHP nomination and VDHR's records) appear to include the roadway right-of-way between Arlington Memorial Bridge and George Washington's home, Mount Vernon (see **Appendix C**).

The boundary of the GWMP is slightly different from that of the MVMH and, as depicted in the 1995 NRHP nomination, includes the roadway right-of-way, plus additional flanking land and stretches between Arlington Memorial Bridge at the south and Potomac, Maryland at the north. For the purposes of this analysis, however, the boundaries of these two linear resources are treated the same along their western side, where the undertaking is to occur. In addition, all GWMP park property within the APE, including lands that extend beyond the historic roadway right-of-way, is assumed to be an NRHP-listed or eligible historic architectural resource. The NPS is currently updating the GWMP NRHP nomination, but because it is still ongoing, this report uses the 1995 GWMP nomination on file with the NRHP. **Figure 4-3** depicts the boundaries of the NRHP-listed resources (MVMH, GWMP, and PNCR) compared to the GWMP National Park property.

**Figure 4-3: Boundaries of the George Washington Memorial Parkway (NRHP Listed) and the George Washington Memorial Parkway National Park**



## 4.5.2 Alexandria Historic District

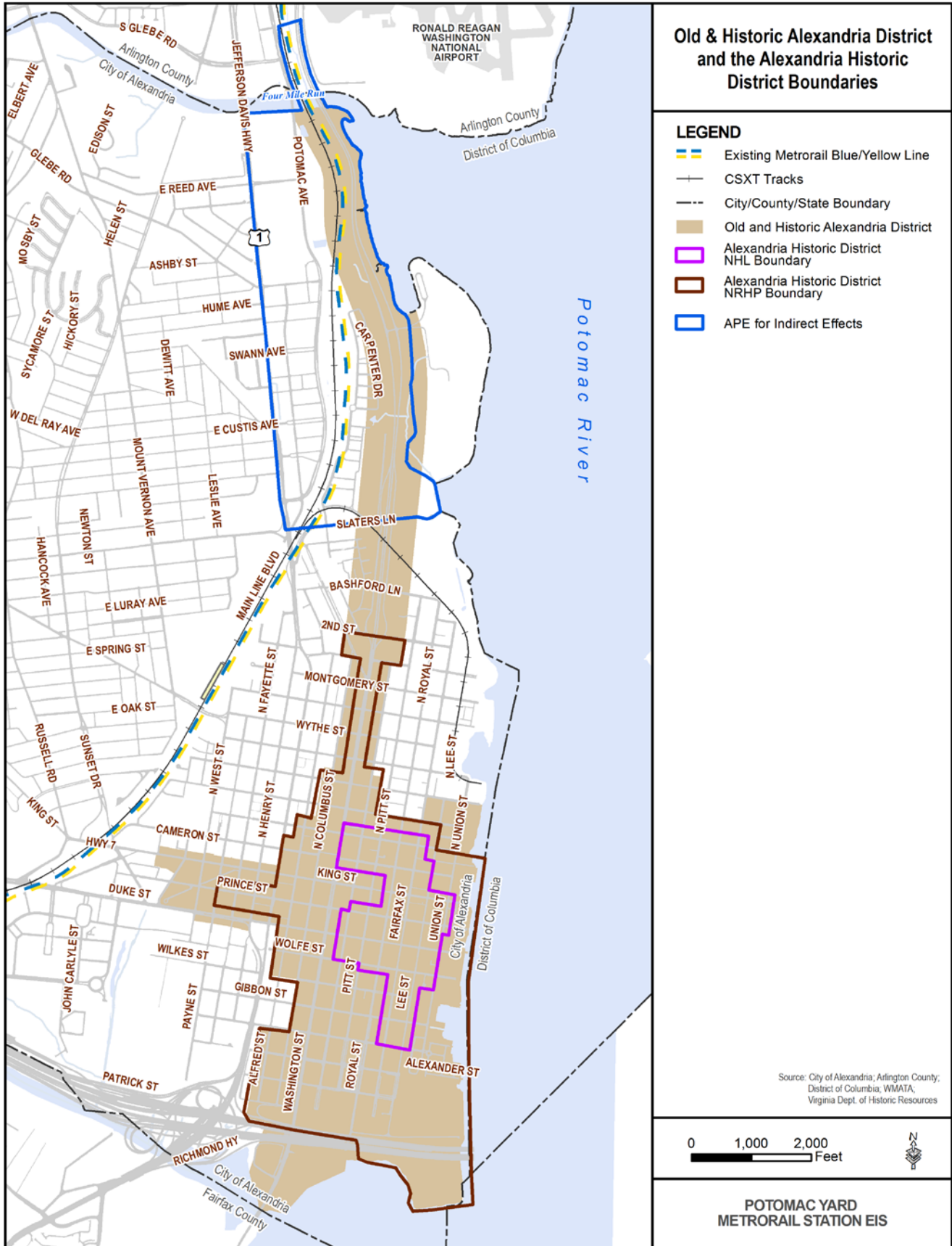
Another inconsistency exists between the mapped and narrative description of the boundaries for the NRHP-listed Alexandria Historic District in downtown Alexandria in the NRHP nomination. The district was determined to be a National Historic Landmark (NHL) in 1966, was listed in the VLR in 1968, and in the NRHP in 1969 (see **Figure 4-4**). The USGS map contained within the nomination shows the district encompassing a large part of downtown Alexandria with the MVMH (as Washington Street) traversing the center. As depicted on the map, the northern boundary only extends as far as Second Street and does not fall within the APE for this project; however, the verbal boundary description in the NRHP nomination describes the boundaries as reflecting City Ordinance No. 1338, and is described below:

..thence north along a line 500 feet east of George Washington Memorial Highway to the north city limits; thence west with the north city line to a point 500 feet west of the centerline of the George Washington Memorial Highway; then south along a line 500 feet west of the centerline of the George Washington Memorial Highway to the centerline of First Street.

This description suggests that the boundaries of the NRHP-listed Alexandria Historic District include 500 feet on either side of the GWMP centerline all the way from First Street to the northern city limit at Four Mile Run, mirroring the boundaries of the OHAD. Mapping tools maintained by VDHR and the City of Alexandria indicate that both agencies recognize the smaller, more confined boundary, which excludes the MVMH north of Second Street.

Because the Second Street boundary appears to be recognized by both agencies, Second Street is used as the northern boundary for the purposes of this investigation. As represented in the NRHP nomination, VDHR's GIS mapping tools, and the City of Alexandria's mapping, the Alexandria Historic District does not fall within the APE and, therefore, is not evaluated in, or relevant to this effects assessment report.

Figure 4-4: Old and Historic Alexandria District and the Alexandria Historic District Boundaries



## 5.0 Effects Assessment

On May 20, 2015, the Preferred Alternative was selected. This section describes potential effects to historic properties in the APE for the Preferred Alternative. Under Section 106, adverse effects include both direct and indirect effects. Direct effects to historic properties include actions such as physical destruction, physical alteration, or removal of the resource to another location. Indirect effects include the introduction of visual, atmospheric, and audible elements (including noise and vibration); neglect that causes deterioration; or transfer, lease, or sale of a federally owned property without adequate provisions. There are three NRHP-listed historic properties within the APE: the MVMH, GWMP, and PNCR. The Greens Scenic Area Easement was recently determined to be eligible as a contributing resource to the NRHP-listed MVMH and NRHP-listed GWMP and is evaluated as such in this report. There is one property within the APE considered to be an NRHP-eligible historic property for the purposes of this Section 106 consultation: Abingdon Apartments. The Preferred Alternative would result in adverse effects to all three NRHP-listed historic properties: the MVMH, GWMP, and PNCR. There would be no adverse effects to the Abingdon Apartments because of the distance of the property from the proposed project activities and the visual buffer created by the Potomac Greens neighborhood.

Analysis of effects for the Preferred Alternative is based on preliminary designs presented in the Draft EIS. Final design of the station and associated temporary and permanent construction activities will be developed during the design-build process. If design features of the Preferred Alternative change from what is presented in this report, additional studies may need to be conducted to assess the potential effects to historic properties.

The following section provides a description of adverse effects to the identified historic properties. This effects evaluation has been updated based upon the results of consultation efforts and will be subject to review and approval by VDHR and other consulting parties in accordance with the Section 106 process.

### 5.1 The Preferred Alternative

Review of the current proposed project activities associated with the Preferred Alternative indicates that it would result in **adverse effects** to the MVMH, GWMP, and PNCR. The construction of the Preferred Alternative would have no adverse effect on Abingdon Apartments because of the distance of the property from the proposed project activities and the visual buffer created by the Potomac Greens neighborhood. **Table 5-1** provides a summary of the effects assessment. **Figures 1-3 through 1-9, 5-1 and 5-2 and Appendix A, Plates 11 through 18** show plans for and photos of the location of the Preferred Alternative with respect to the historic resources.

**Table 5-1: Effects of the Preferred Alternative on Historic Properties**

Historic Property Name	Direct Adverse Effect	Indirect Adverse Effect
MVMH	<p><b>Yes</b>, resulting from:</p> <ul style="list-style-type: none"> <li>• tree and shrub removal within the GWMP and MVMH NRHP boundaries associated with temporary and permanent construction activities; and</li> <li>• a staging area within the Greens Scenic Area Easement; and</li> <li>• the permanent construction of station facilities, realigned track, and retaining wall (Option 1) or earthen berm (Option 2) within the MVMH and GWMP NRHP boundaries, and Greens Scenic Area Easement.</li> </ul>	<p><b>Yes</b>, resulting from tree and shrub removal associated with construction of:</p> <ul style="list-style-type: none"> <li>• a staging area within the Greens Scenic Area Easement; and</li> <li>• the station facilities, realigned track, and retaining wall (Option 1) or earthen berm (Option 2) within the MVMH, the GWMP, and Greens Scenic Area Easement.</li> </ul> <p>The activities would compromise the scenic quality of the MVMH by opening up views of the station facilities, tracks, and shopping center from the MVMH.</p>

Historic Property Name	Direct Adverse Effect	Indirect Adverse Effect
	<p>Approximately 0.58 acre of treed upland and forested wetland to be removed including long-term loss of 10-15 trees in areas that contribute to the original landscape design for both Option 1 and Option 2.</p>	<p>An adverse effect would also result from the permanent transfer of between 0.16 and 0.33 acre of MVMH and GWMP property out of NPS ownership without measures to ensure long-term preservation of the property. An adverse effect would also result from between 1.71 and 1.94 acres of Greens Scenic Area Easement land that would no longer be held by NPS. No Adverse Effects would result from an additional between 2.86 and 3.09 acres of Greens Scenic Area Easement that would be transferred to NPS in fee simple ownership to be administered as part of the GWMP property.</p>
GWMP	<p><b>Yes</b>, resulting from:</p> <ul style="list-style-type: none"> <li>• tree and shrub removal within the GWMP and MVMH NRHP boundaries associated with temporary and permanent construction activities; and</li> <li>• a staging area within the Greens Scenic Area Easement; and</li> <li>• the permanent construction of station facilities, realigned track, and retaining wall (Option 1) or earthen berm (Option 2) within the MVMH and GWMP NRHP boundaries, and Greens Scenic Area Easement.</li> </ul> <p>Approximately 0.58 acre of treed upland and forested wetland to be removed including long-term loss of 10-15 trees in areas that contribute to the original landscape design for both Option 1 and Option 2.</p>	<p><b>Yes</b>, resulting from tree and shrub removal associated with construction of:</p> <ul style="list-style-type: none"> <li>• a staging area within the Greens Scenic Area Easement; and</li> <li>• the station facilities, realigned track, and retaining wall (Option 1) or earthen berm (Option 2) within the MVMH, the GWMP, and Greens Scenic Area Easement.</li> </ul> <p>The activities would compromise the scenic quality of the GWMP by opening up views of the station facilities, tracks, and shopping center from the GWMP.</p> <p>An adverse effect would also result from the permanent transfer of between 0.16 and 0.33 acre of MVMH and GWMP property out of NPS ownership without measures to ensure long-term preservation of the property. An adverse effect would also result from between 1.71 and 1.94 acres of Greens Scenic Area Easement land that would no longer be held by NPS. No Adverse Effects would result from an additional between 2.86 and 3.09 acres of Greens Scenic Area Easement that would be transferred to NPS in fee simple ownership to be administered as part of the GWMP property.</p>
PNCR <sup>1</sup>	<p><b>Yes</b>, resulting from:</p> <ul style="list-style-type: none"> <li>• tree and shrub removal within the GWMP and MVMH NRHP boundaries associated with temporary and permanent construction activities; and</li> <li>• a staging area within the Greens Scenic Area Easement; and</li> <li>• the permanent construction of station facilities, realigned track, and retaining wall (Option 1) or earthen berm (Option 2) within the MVMH and GWMP NRHP boundaries, and Greens Scenic Area Easement.</li> </ul> <p>Approximately 0.58 acre of treed upland and forested wetland to be removed including long-term loss of 10-15 trees in areas that contribute</p>	<p><b>Yes</b>, resulting from tree and shrub removal associated with construction of:</p> <ul style="list-style-type: none"> <li>• a staging area within the Greens Scenic Area Easement; and</li> <li>• the station facilities, realigned track, and retaining wall (Option 1) or earthen berm (Option 2) within the MVMH, the GWMP, and Greens Scenic Area Easement.</li> </ul> <p>The activities would compromise the scenic quality of the MVMH and GWMP by opening up views of the station facilities, tracks, and shopping center from the MVMH and GWMP.</p> <p>An adverse effect would also result from the permanent transfer of between 0.16 and 0.33 acre of MVMH and</p>

<sup>1</sup> The boundaries of the MVMH, GWMP, and PNCR are the same for the purposes of this analysis; therefore, land transfer estimates are the same.

Historic Property Name	Direct Adverse Effect	Indirect Adverse Effect
	to the original landscape design for both Option 1 and Option 2.	GWMP property out of NPS ownership without measures to ensure long-term preservation of the property. An adverse effect would also result from between 1.71 and 1.94 acres of Greens Scenic Area Easement land that would no longer be held by NPS. No Adverse Effects would result from an additional between 2.86 and 3.09 acres of Greens Scenic Area Easement that would be transferred to NPS in fee simple ownership to be administered as part of the GWMP property.
Abingdon Apartments	None	None

Figure 5-1: The Preferred Alternative and Historic Properties

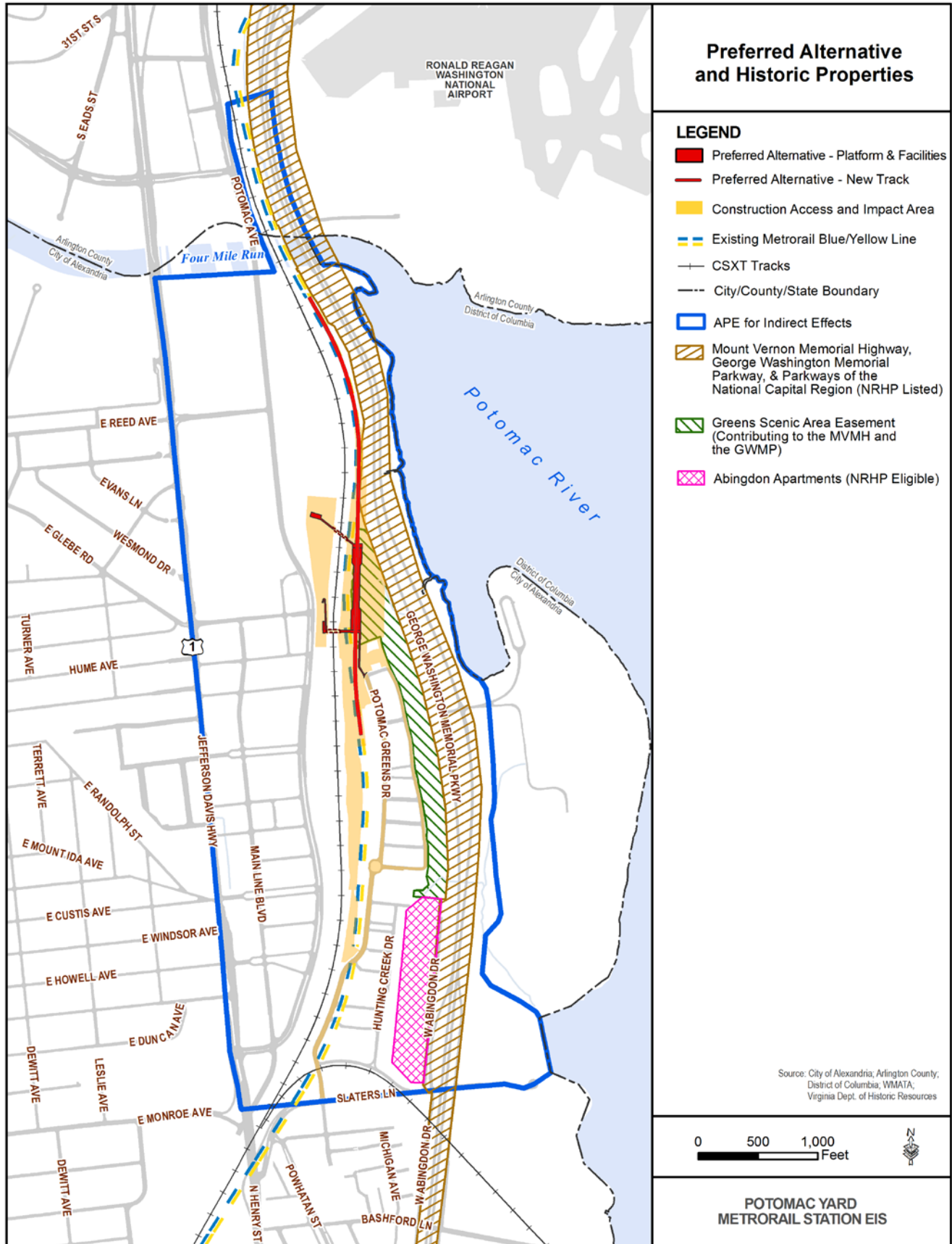
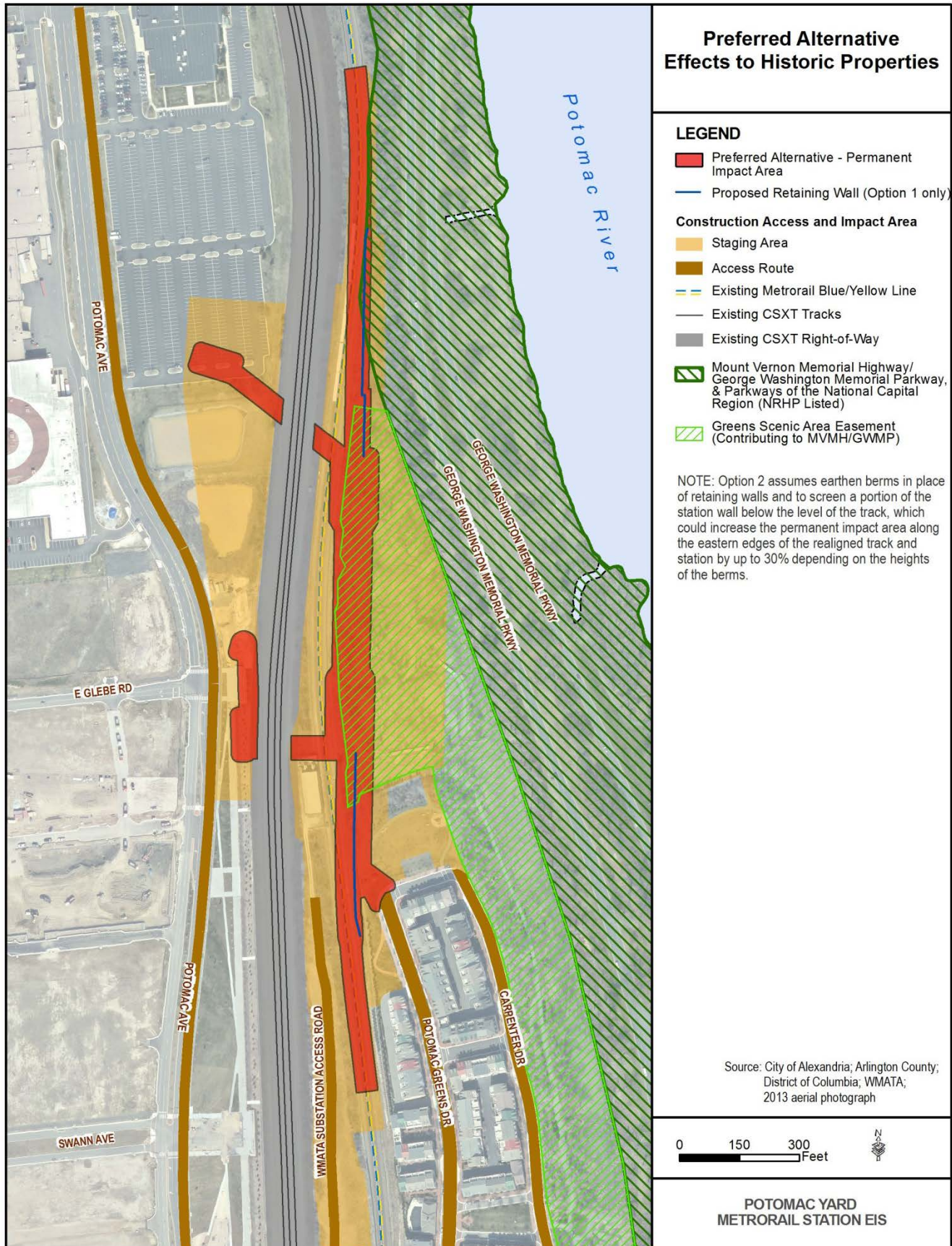


Figure 5-2: The Preferred Alternative and Effects to Historic Properties



The construction of the Preferred Alternative would result in **adverse effects** to the MVMH, GWMP, and PNCR. See below for a more detailed discussion of the anticipated effects.

### **Temporary Construction Activities and Staging Area**

Construction activities and temporary staging areas under the Preferred Alternative would result in direct and indirect **adverse effects** to the MVMH, GWMP, and PNCR. Direct effects would result from the removal of trees and shrubs that are contributing features of the MVMH, GWMP, and the Greens Scenic Area Easement. Removal of the trees and shrubs would also open up viewsheds to the railroad uses and commercial development on the west side of the MVMH/GWMP that were never part of the original design intent, resulting in indirect adverse effects.

As for direct effects, activities associated with the proposed construction activities and a temporary staging area would cause damage to contributing features of the MVMH and GWMP. The temporary staging area, which is proposed to be constructed immediately north of the Potomac Greens development between the railroad tracks and the MVMH/GWMP boundaries, and area required for access to construct the station and realigned track would require removal of approximately 2.09 acres of treed upland and forested wetland within the boundaries of the historic properties (see **Figures 5-1 and 5-2**). Of this acreage, approximately 0.58 acre fall within the original boundaries of the MVMH and GWMP, and 1.51 acres fall within the Greens Scenic Area Easement, an area determined to be a contributing resource to both the MVMH and the GWMP in 2015 (see determination of eligibility in **Appendix G**).

In 2009, Virginia Polytechnic Institute and State University completed a comprehensive cultural landscape study for NPS to assist its long-range planning for the GWMP. The survey divided the GWMP into three sections, with the Potomac Yard Metrorail Station project falling within the “Central Section: Alexandria to Memorial Bridge.” Within that geographic location, the Potomac Yard project falls within what is called the “Daingerfield Island” subsection, or the stretch between Four Mile Run and Slaters Lane. The study analyzed original and subsequent landscaping plans for the GWMP, established a period of significance for each section, and evaluated integrity. The report identified the period of significance of the Daingerfield Island subsection as 1932–1963 (Virginia Polytechnic Institute and State University 2009b: 298). The period of significance in the landscape survey is different from the one identified in the NRHP nomination, which only includes the roadway and identifies the period of significance as the years of the roadway’s construction. The landscape study provides a much more comprehensive analysis that addresses the type, age, and integrity of the plantings along the GWMP.

Wilbur Simonson’s original 1932 planting plan called for a dense vegetative screen on the west side of the MVMH/GWMP in the Daingerfield Island section as a way to screen the swamp and rail yards. Shade and medium-sized trees and shrubs were to be planted singly, as accents, and in groups as filler. Large oaks and elms were to be spaced apart, with room in between for the smaller trees and shrubs. And because a good portion of the area is low-lying, Simonson chose plant and tree species that were adaptable to wet conditions (Virginia Polytechnic Institute and State University 2009a: 42). The landscape survey notes that trees and shrubs were planted in masses intended to be “grown into a naturalized wall of vegetation” and function as a continuous wooded swath.

A subsequent planting effort in 1936 included the installation of over 1,400 white pines and 250 deciduous (maples, elms, oaks, and sycamore) trees to further screen the railroad activity at Potomac Yard (Virginia Polytechnic Institute and State University 2009: 42). Though there was a subsequent planting plan in 1963 in the Daingerfield Island region, the naturalized western side of the MVMH/GWMP contains specimens from the 1932 and 1936 planting plans.

While Wilbur Simonson's original intent (which was perpetuated in subsequent planting plans) was to thickly screen the western side of the MVMH/GWMP with vegetation to obscure views of the swamp and the rail yard, considerable changes to the buffer over the years, particularly from the loss of trees, have compromised its integrity in the vicinity of the proposed access driveway. The loss of trees is significant compared to the amount of trees and shrubs planted in the original (1932) and subsequent (1936) planting plans, but because the western side of the MVMH/GWMP has since returned to a natural woodland state, discerning which trees were planted and which grew on their own can be difficult. What is certain, however, is that the thick wall of trees functions as intended: to shield views of Potomac Yard uses from the parkway as a way to perpetuate a scenic quality and contemplative experience for travelers.

According to the 2009 cultural landscape survey, some of the trees and shrubs within the 0.58 acre that fall within the original boundaries of the MVMH and the GWMP were part of the 1936 planting plan and, as original features along the west side of the highway, are considered contributing features to the overall character of the MVMH, GWMP, and PNCR. Removing these features for construction of the temporary staging area would constitute a direct adverse effect to all three historic properties.

The Greens Scenic Area Easement, on the other hand, which was not part of the original planting plan, was determined to be a contributing resource to the MVMH and GWMP because of its natural, undeveloped nature and ability to preserve the historic scenic qualities of the highway and parkway. Since construction of the staging area would require the removal of a substantial swath of trees, shrubs, and vegetation within the easement, the activities would compromise the integrity of the MVMH and GWMP. As a result, removing trees and shrubs for the staging area, within the original boundaries of the MVMH and the GWMP and within the Greens Scenic Area Easement, would constitute a direct adverse effect to all three NRHP-listed historic properties: the MVMH, GWMP, and PNCR.

As for indirect effects, removal of the trees and shrubs for the temporary staging area would open viewsheds from the highway to the industrial and commercial development to the west that were never part of the original design intent. In fact, Simonson's intent was to plant a thick buffer of trees and shrubs along the west side of the MVMH specifically to screen views of the former Potomac Yard. While the rail yard is no longer extant, removing trees from a small western edge of the MVMH and GWMP, and a much bigger portion of the Greens Scenic Area Easement, would make the current and proposed development (including the proposed Potomac Yard Metrorail Station, the Metrorail tracks, and the Potomac Yard Shopping Center) much more visible from the highway. These changes would introduce views to the west that were never intended as part of the design and would compromise the scenic quality and contemplative experience for travelers, an important characteristic of the parkway experience. As a result, these changes would cause an indirect adverse effect to the MVMH, GWMP, and PNCR.

### **Option 1: Station Facilities and Realigned Track with the Retaining Wall**

The construction of the station facility and realigned track with the retaining wall would result in both direct and indirect **adverse effects** to the MVMH, GWMP, and PNCR. Removal of trees and shrubs that are contributing features of the MVMH, GWMP, and Greens Scenic Area Easement, would result in a direct adverse effect, but would also open up viewsheds of the industrial and commercial development on the west side of the MVMH/GWMP that were never part of the original design intent, resulting in indirect adverse effects. Indirect adverse effects would also result from construction of the station facility and associated retaining wall, which would be visible from the MVMH and GWMP.

The Metrorail Station would be located north of the Potomac Greens development, occupying a large part of the Greens Scenic Area Easement (see **Figures 1-3 through 1-9 and 5-1 and 5-2**). As for direct effects, activities associated with the proposed construction of the station facilities and realigned track would cause

damage to part of three NRHP-listed resources: the MVMH, GWMP, and PNCR. Construction of the station facilities and realigned track would require approximately 0.16 acre of treed upland and forested wetland to be permanently removed from the MVMH and GWMP, which includes up to five trees over two inches in diameter at breast height (DBH).

According to the 2009 cultural landscape survey, some of the trees and shrubs within the 0.16 acre that fall within the original boundaries of the MVMH and the GWMP were part of the 1936 planting plan and, as original features along the west side of the highway, are considered contributing features to the overall character of the MVMH, GWMP, and PNCR. Removing these features for construction of the station and track would constitute a direct adverse effect to all three historic properties.

The Greens Scenic Area Easement, on the other hand, which was not part of the original planting plan, was determined to be a contributing resource to the MVMH and GWMP because of its natural, undeveloped nature and ability to preserve the historic scenic qualities of the highway. Since construction of the station, track, and retaining wall would require the permanent removal of approximately 0.69 acre of treed upland and forested wetland within the Greens Scenic Area Easement, these activities would also compromise the overall ability of the MVMH and GWMP to convey their significance. As a result, removing trees and shrubs for the station facilities, realigned track, and retaining wall within the original boundaries of the MVMH and the GWMP, and within the Greens Scenic Area Easement, would constitute a direct adverse effect to all three NRHP-listed historic properties: MVMH, GWMP, and PNCR.

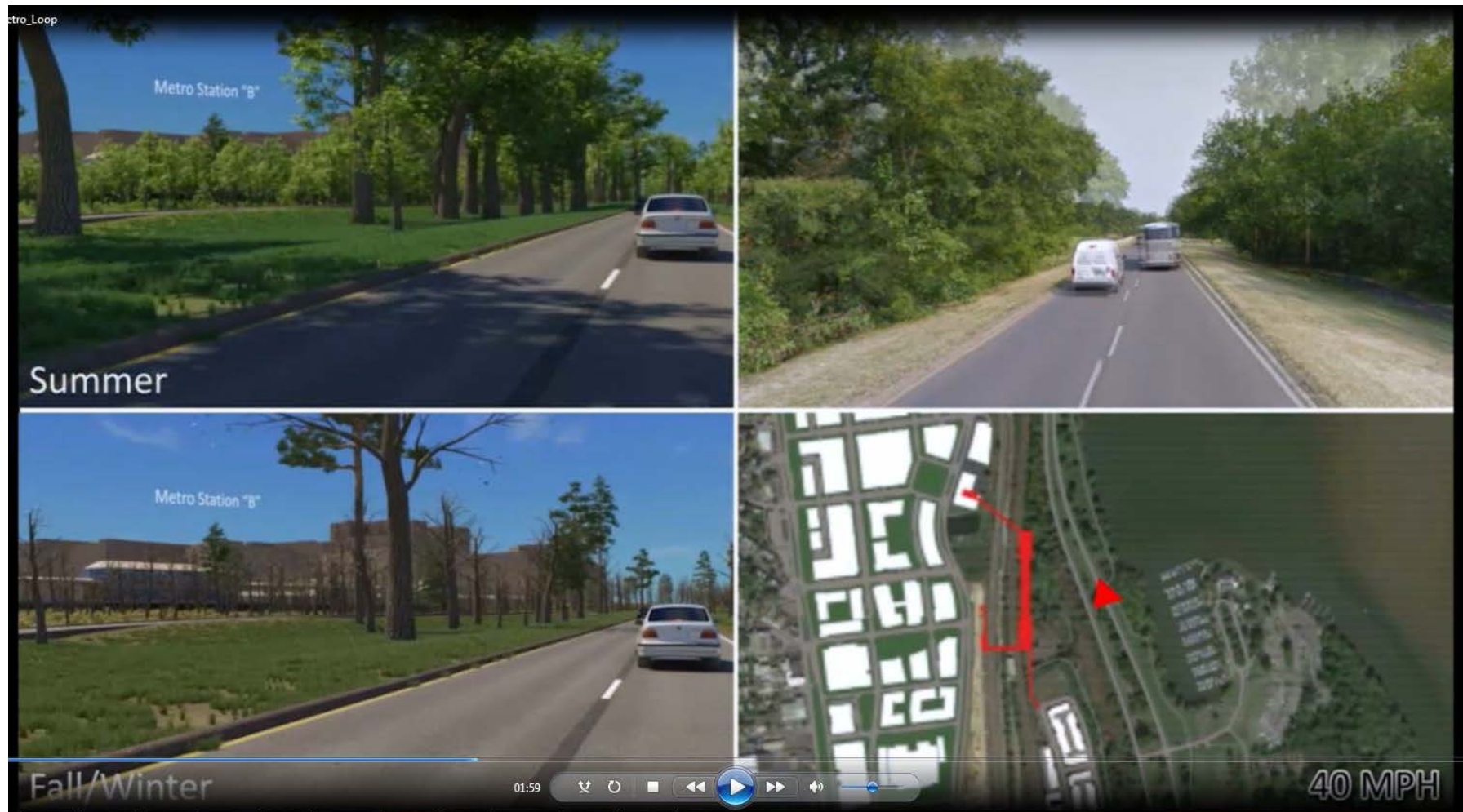
As for indirect effects, removal of the trees and shrubs for the station facilities, realigned track, and retaining wall would open viewsheds from the highway to the railroad uses and commercial development to the west that were never part of the original design intent. In fact, Simonson's intent was to plant a thick buffer of trees and shrubs along the west side of the MVMH specifically to screen views of the former Potomac Yard. While the rail yard is no longer extant, removing trees from a small western edge of the MVMH and GWMP, and a much bigger portion of the Greens Scenic Area Easement, would make the current and proposed development (including the proposed Potomac Yard Metrorail Station, the Metrorail tracks, and the Potomac Yard Shopping Center) much more visible from the highway. Based on the area to be cleared, views would be especially compromised from both the northbound and southbound lanes of the MVMH/GWMP in the area of the Greens Scenic Area Easement, north of the Potomac Greens neighborhood (see drive-by video simulation stills, **Figures 5-3** and **5-4**). The views of commercial development in the renderings are based on the planned development in Potomac Yard and a massing model of that development prepared by the City of Alexandria. Images of the massing model are shown in **Appendix K**. These changes would introduce views to the west that were never intended as part of the design and would compromise the scenic quality and contemplative experience for travelers, an important characteristic of the parkway experience. As a result, construction of the station facility and realigned track would also cause an indirect adverse effect to the MVMH, GWMP, and PNCR.

Indirect effects would also result from the proposed station and retaining walls. The structures would for the most part not be visible from primary Parkway viewsheds during late spring, summer, and early fall months with leaves-on conditions (see **Figures 5-5** through **5-8**); however, wintertime leaves-off conditions would allow views of the station and retaining walls, from both northbound and southbound lanes and by users of the Mount Vernon Trail. The exposed station wall below the level of the tracks and the retaining walls under the realigned tracks, because they are relatively low to the ground, would mostly be screened by trees and shrubs during leaves-on conditions; however, these would be visible during winter along with the station building and north pedestrian bridge. The retaining wall is visible in the wintertime drive-by video simulation (see **Figure 5-4**). **Figures 5-9** and **5-10** show the station adjacent to Potomac Greens Park with the Greens Scenic Area easement and Potomac Yard development in the background for further context.

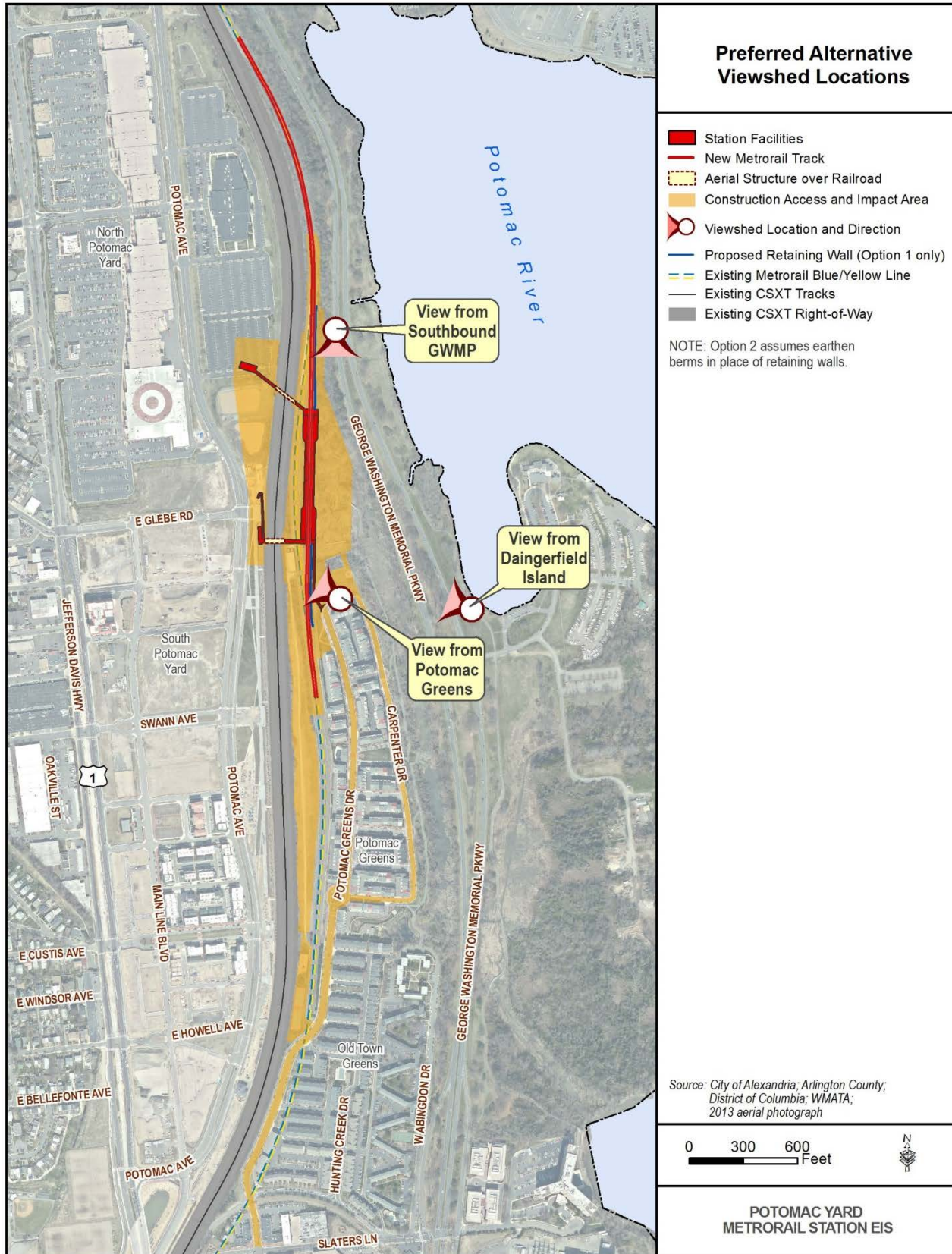
**Figure 5-3:** Video Simulation Stills Showing Preferred Alternative Option 1 (Build Alternative B) from Southbound Lanes of the GWMP, 2040 Build (City of Alexandria 2014)



**Figure 5-4:** Video Simulation Stills Showing Preferred Alternative Option 1 (Build Alternative B) from Northbound Lanes of the GWMP, 2040 Build (City of Alexandria 2014)



**Figure 5-5: Viewshed Locations of Photo Renderings of Preferred Alternative**



**Figure 5-6: Photo Rendering of Existing and 2020/2040 Preferred Alternative (Options 1 and 2), View from Southbound GWMP, Leaves-On Conditions**



**Figure 5-7: Photo Rendering of Existing and 2020 Preferred Alternative (Options 1 and 2), View from Daingerfield Island, Leaves-On Conditions**

**Existing Viewshed**



**2020 Viewshed Post-Construction**



Figure 5-8: Photo Rendering of 2040 No Build and Preferred Alternative (Options 1 and 2), View from Daingerfield Island, Leaves-On Conditions

2040 No Build Viewshed



2040 Viewshed Post-Construction



Figure 5-9: Photo Rendering of Existing and 2020 Preferred Alternative (Options 1 and 2), View from Potomac Greens, Leaves-On Conditions



Figure 5-10: Photo Rendering of 2040 No Build and Preferred Alternative (Options 1 and 2), View from Potomac Greens, Leaves-On Conditions



## **Option 2: Station Facilities and Realigned Track with Earthen Berm**

The construction of the station facility and realigned track with the earthen berm would result in direct and indirect **adverse effects** to the MVMH, GWMP, and PNCR. Removal of trees and shrubs that are contributing features of the MVMH, GWMP, and Greens Scenic Area Easement, would result in a direct adverse effect, but would also open up viewsheds of the railroad uses and commercial development on the west side of the MVMH/GWMP that were never part of the original design intent, resulting in indirect adverse effects. Indirect adverse effects would also result from construction of the station facility and associated earthen berm, which would be visible from the MVMH and GWMP; however the magnitude of the visual effect would be less than Option 1 with the retaining wall.

The Metrorail Station would be located north of the Potomac Greens development, occupying a large part of the Greens Scenic Area Easement (see **Figures 1-3 through 1-9 and 5-1 through 5-4**). As for direct effects, activities associated with the proposed construction of the station facilities and realigned track with the earthen berm would cause damage to part of three NRHP-listed resources: the MVMH, GWMP, and PNCR. Construction of these facilities under Option 2, which includes the earthen berm instead of the retaining wall, would require the permanent removal of up to approximately 0.16 acre additional treed upland and forested wetland from the MVMH and GWMP compared to Option 1.

According to the 2009 cultural landscape survey, some of the trees and shrubs proposed for removal within the original boundaries of the MVMH and the GWMP were part of the 1936 planting plan and, as original features along the west side of the highway, are considered contributing features to the overall character of the MVMH, GWMP, and PNCR. Removing these features for construction of the station and track would constitute a direct adverse effect to all three historic properties.

The Greens Scenic Area Easement, on the other hand, which was not part of the original planting plan, was determined to be a contributing resource to the MVMH and GWMP because of its natural, undeveloped nature and ability to preserve the historic scenic qualities of the highway. Since construction of the station, track, and berm would require the removal of trees and vegetation within the Greens Scenic Area Easement, these activities would also compromise the overall ability of the MVMH and GWMP to convey their significance. As a result, removing trees and shrubs for the station facilities, realigned track, and berm within the original boundaries of the MVMH and the GWMP, and within the Greens Scenic Area Easement, would constitute a direct adverse effect to all three NRHP-listed historic properties: MVMH, GWMP, and PNCR.

As for indirect effects, removal of the trees and shrubs for the station facilities, track, and berm would open viewsheds from the highway to the industrial and commercial development to the west that were never part of the original design intent. In fact, Simonson's intent was to plant a thick buffer of trees and shrubs along the west side of the MVMH specifically to screen views of the former Potomac Yard. While the rail yard is no longer extant, removing trees from a small western edge of the MVMH and GWMP, and a much bigger portion of the Greens Scenic Area Easement, would make the current and proposed development (including the proposed Potomac Yard Metrorail Station, the Metrorail tracks, and the Potomac Yard Shopping Center) much more visible from the highway. Based on the area to be cleared, views would be especially compromised from both the northbound and southbound lanes of the MVMH/GWMP in the area of the Greens Scenic Area Easement, north of the Potomac Greens neighborhood. These changes would introduce views to the west that were never intended as part of the design and would compromise the scenic quality and contemplative experience for travelers, an important characteristic of the parkway experience. As a result, construction of the station facility, realigned track, and berm would also cause an indirect adverse effect to the MVMH, GWMP, and PNCR.

Indirect effects would also result from the proposed station. The structures would for the most part not be visible from primary Parkway viewsheds during late spring, summer, and early fall months with leaves-on conditions (see **Figures 5-5** through **5-8**); however, wintertime leaves-off conditions would allow views of the station and realigned track, from both northbound and southbound lanes and by users of the Mount Vernon Trail. These wintertime views would be similar to those in the video simulation for the Preferred Alternative Option 1, although without the retaining wall (see **Figures 5-5** through **5-7**). The earthen berm, covering a portion of the exposed station wall below the level of the tracks and the retaining walls under the realigned tracks, would help screen these built elements during winter, although the station building and north pedestrian bridge would still be visible. **Figures 5-9** and **5-10** show the station adjacent to Potomac Greens Park with the Greens Scenic Area easement and Potomac Yard development in the background for further context.

### **Land Transfer**

The Preferred Alternative, both Options 1 and 2, would require a transfer of land that falls within all three NRHP-listed historic properties out of NPS ownership. This land transfer would constitute an **adverse effect**, because the criteria of adverse effect apply (36 CFR 800.5(a)(2)(vii)).

Approximately between 0.16 and 0.33 acre of NRHP-listed property currently owned by NPS would be transferred out of its ownership to construct the realigned track. In addition, the Preferred Alternative would permanently take between 1.71 and 1.94 acres of Greens Scenic Area Easement currently held by NPS. Under Section 106, transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance constitutes an adverse effect. Since no provisions for the resources' protection would be included in the transfer agreements, both land transfers would constitute an indirect adverse effect.

While provisions for the protection of the resources will not be part of the transfer agreement, NPS and the City of Alexandria have had ongoing discussions about the land transfer and have developed a preliminary list of potential measures to mitigate the adverse effects of the transfer under the Preferred Alternative on the NRHP-listed MVMH and GWMP. These preliminary mitigation measures are included in a draft MOA located in **Appendix I**.

In addition to these two pieces of land, a 3.09-acre piece of land within the Greens Scenic Area Easement would be transferred from the City of Alexandria to NPS in fee simple ownership for NPS to administer as part of the GWMP property. This transfer would result in no adverse effect.

### **Noise**

The undertaking would cause **no adverse effects** resulting from increased noise levels. This preliminary assessment is based on the nature of the MVMH and GWMP (and the PNCR) as a four-lane parkway. According to the Noise and Vibration Technical Memorandum completed as part of the Draft EIS, the existing noise in the vicinity of the proposed undertaking is already dominated by background noise resulting from roadways (including the MVMH and GWMP), railroads, and the Ronald Reagan Washington National Airport. Noise effects are more likely to affect types of historic properties that are sensitive to noise and have an inherent quiet quality that is part of a property's historic character and significance. Examples of property types that are sensitive to noise include (but are not limited to) residences, parks, libraries, museums, and schools. Roadway resources of considerable size and traffic volume like the MVMH and GWMP (and PNCR) are not particularly sensitive to noise because they already generate considerable noise. The assessment of indirect adverse effects may change as details of the undertaking are refined during final design.

### **Construction Traffic**

Construction traffic would have **no adverse effect** on the MVMH, GWMP, or PCNR. No construction traffic would use the roadway of the MVMH, GWMP, or PCNR to access the site. Construction vehicles will use other public roadways in the vicinity as access routes to the site.

## 6.0 Results

Four historic properties over 50 years of age are located within the APE. Of these, three are NRHP-listed linear transportation resources: the MVMH, GWMP, and PNCR. In March 2015, the Greens Scenic Area Easement was determined to be a contributing resource to the MVMH and GWMP. One additional resource is considered, for the purposes of this consultation, NRHP eligible: the Abingdon Apartments, which may be eligible as an associated property type of a future MPD entitled *Colonial Revival Apartment Complexes of Alexandria* (CRACA). Following survey and evaluation, it was determined that the Preferred Alternative for the proposed Potomac Yard Metrorail Station project would have direct and indirect adverse effects on all three NRHP-listed resources. The Abingdon Apartments would not be affected.

The effects assessment determined that adverse effects to the MVMH, GWMP, and PNCR would result from tree and shrub removal for temporary and permanent project activities such as a temporary construction staging areas and construction of the station facilities, realigned track, and retaining wall or earthen berm. Adverse effects would also result from the construction of station facilities within the boundaries of the GWMP and from the transfer of land out of federal ownership without provisions to ensure the long-term preservation of the resources.

Section 106 regulations state that when an agency finds that there is an adverse effect, it must begin consultation to seek ways to avoid, minimize, or mitigate the adverse effects. The agency consults to resolve adverse effects with the SHPO and other consulting parties. Consultation usually results in an MOA, which outlines agreed-upon measures that the agency will take to avoid, minimize, or mitigate the adverse effects.

During the Draft EIS process, the FTA has consulted with NPS, the City of Alexandria, and other consulting parties to develop minimization and mitigation strategies. NPS and City of Alexandria have worked together to develop the framework for a Net Benefits Agreement; an April 20, 2015 letter summarizing those mitigation measures forms the basis of the mitigation stipulations contained in the draft MOA located in **Appendix I**. Measures being considered include transfer of the underlying property of the Greens Scenic Area Easement to NPS; design review of prominent elements of the station; storm water management improvements to Daingerfield Island; implementation of a master plan for improvements to Daingerfield Island; repairs and improvements to the Mount Vernon Trail; and completion of various planning studies to address management needs for the south segment of the MVMH/GWMP.

Provisions relating to an MOA are detailed in 36 CFR Part 800.6. The MOA will be prepared in consultation with VDHR, and the Advisory Council on Historic Preservation (ACHP) will be notified and invited to participate. Interested (federally recognized) Native American tribes, local governments, and other parties will be provided the draft materials and invited to be consulting parties to the agreement document.

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